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BALABISH

BY

G. A. WAINWRIGHT

WITH A PREFACE BY

T. WHITTEMORE

WITH TWENTY-FIVE PLATES

THIRTY-SEVENTH MEMOIR OF

THE EGYPT EXPLORATION SOCIETY

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PREFACE.

By Professor THOMAS WHITTEMORE.

At the close of the season of 1914, at Abydos, Mr. G. A. Wainwright and I turned to a special concession granted to the Egypt Exploration Society by the Department of Antiquities, in response to a request of the American branch of the Society for objects for a group of small American museums.

The site included Sawama and Balabish. Both had been previously excavated by the Department of Antiquities, as well as frequently plundered by natives, but it was thought that they might still yield types of pottery much sought by the museums, and, perhaps, other objects of interest.

Work was begun at Sawama with about twenty men and twice as many boys. An interesting Eighteenth Dynasty cemetery was found here, consisting chiefly of burials of women. Although few of these burials were undisturbed, many objects remained, beautifully to characterize the jewellers' art of the time. Among the objects were bracelets of ebony and ivory, and a necklace of exquisite silver ornaments in the form of flies; ivory wands, carved with the head of Hathor, delicate portrait reliefs in plaster, toilet articles in lapis lazuli, blue glass, ivory, wood and tortoise-shell. The pottery, largely Syrian or Syrianizing, presented many charming and some rare forms. The cemetery was rich in scarabs of Amenophis I, Tuthmosis III, and Amenophis III.

The excavation at Balabish, fifty miles south of Sawama, on the same side of the river, carried out by Mr. Wainwright and myself in the winter of 1915, was the only excavation undertaken by the Society during the war.

At Balabish we found the site to be mainly of the New Kingdom and later. The burials, though plundered, yielded objects of considerable interest and of distinct museum value. But the discovery of signal importance here was a small group of pan-graves.

The graves of this group lay adjoining one another, on desert promontories at the ends nearest the cultivation. The graves were not shallow and pan-shaped, but of the deeper well-shaped variety, from $1\frac{1}{2}$ to 2 metres deep. Typical pan-grave objects were also found in oblong graves so small as often to suggest crouched burials, and in full length rectangular graves of the usual Egyptian type.

Among the contents of these graves were ceremonially broken *kohl*-pots, bronze axe-heads, jars of scented ointment, finely worked leather—presumably in the form of garments—dyed and with pierced and tooled ornamentation, shell bracelets, bow-strings, leather wrist-guards, and an exceptionally interesting bag woven of giraffe's hair. There was an abundance of well-

polished pottery, both plain and with metallic black rim, as well as fine, dull red ware in the form of bowls with incised ornamentation.

Thus it will be seen that these burials present the two-fold, little-known life of this belated people, who, leaving the backwaters of the South, came bearing lingering pre-dynastic tradition into the new civilization of the Middle Kingdom.

In the present volume it has been found possible to publish only an account of the work at Balabish. It is written entirely by Mr. Wainwright from our notes and from the card catalogue in his possession, and has been seen through the Press by the officers of the Society. The drawings have all been made by Mr. Wainwright and the photographs by a native Arab workman.

Since 1915 Mr. Wainwright has been in Egypt and I in Russia; the account of the excavations at Sawama therefore still remains to be written, but we hope that it may be published during the coming year. In the meantime, those interested may consult our preliminary report in the *Journal of Egyptian Archaeology*, vol. i, pp. 246–7.

All the objects from Balabish, except those reserved for the Cairo Museum, are in America. Their present location is indicated in each case in the Appendix to this volume.

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LIST OF ABBREVIATIONS

USED IN QUOTING WORKS OF REFERENCE IN THE FOOTNOTES.

A.S.N. . . .	*The Archaeological Survey of Nubia. Reports* for 1907 to 1910 and *Bulletin* covering the same period, by Reisner, Firth and others.
Ä.Z. . . .	*Zeitschrift für ägyptische Sprache.*
B., *A.R.* . . .	Breasted, *Ancient Records.*
L.A.A.A. . . .	*Annals of Archaeology and Anthropology,* issued by the Institute of Archaeology, University of Liverpool.
Lacau, *Sarcophages* .	Lacau, *Sarcophages antérieurs au Nouvel Empire* (*Catalogue Général du Musée du Caire*).
L., *D.* . . .	Lepsius, *Denkmäler aus Ägypten und Äthiopen.*
N., *B.H.* . . .	Newberry, *Beni Hasan.*
P., *C.A.* . . .	Peet, *Cemeteries of Abydos.*
P., *D.P.* . . .	Petrie, *Diospolis Parva.*
P., *G.R.* . . .	Petrie, *Gizeh and Rifeh.*
P., *H.I.C.* . . .	Petrie, *Hyksos and Israelite Cities.*
P., *I.K.G.* . . .	Petrie, *Illahun, Kahun and Gurob.*
P., *K.G.H.* . .	Petrie, *Kahun, Gurob and Hawara.*
P., *L.G.M.* . .	Petrie and others, *The Labyrinth, Gerzeh and Mazghuneh.*
P., *N.B.* . . .	Petrie, *Naqada and Ballas.*
P., *R.T.* . . .	Petrie, *Royal Tombs of the Earliest Dynasties.*
S., *Pyr.* . . .	Sethe, *Die Altaegyptischen Pyramidentexte.*
S., *Urk.* . . .	Sethe, *Urkunden der* 18. *Dynastie.*

BALABISH

CHAPTER I.

THE SITE, BURIALS, DATING EVIDENCE, &c.

Plates I, XV.

The Site.

The site selected for this season's work on behalf of the American Branch of the Egypt Exploration Society was at Balabish on the eastern bank of the Nile, just at the upper end of the triangular piece of land enclosed between the river and the eastern desert. At our village, however, the Nile still hugs the cliff and runs within three quarters of an hour's walk of the desert edge. Though a long way by river, Balabish is actually only a little E.S.E. of Baliana, for between the two the Nile takes a sharp double curve, and for a short distance flows W.S.W. The site is situated about equally distant from the railway stations of Baliana or Abu Tisht, perhaps slightly farther from the former than from the latter. As may easily be imagined, it is a district very much cut off from the rest of the world. Balabish is a small village not shown on Baedeker's map, but corresponding in position to that called Gababish in the *Description de l'Égypte*.[1] The name does not sound Arabic and may come down from ancient days, as without doubt does that of Samhoud just opposite. Moreover, it is situated in a neighbourhood which was important from the earliest times onwards, being not far from Abydos or Diospolis Parva. There must have been a place of some importance here, as the large cemeteries bear witness. These are of the Middle Kingdom, Pan-grave, New Kingdom, and Coptic dates. There has also probably been a pre-dynastic cemetery in the neighbourhood. We got another indication of the ancient importance of this site in the fact that, although the village near the cemetery is small and unimportant to-day, the whole district and all its villages go by the name of Balabish. It requires a considerable amount of explanation to make clear which of all the possible villages one wants.

The inhabitants are rather exclusive, keep to themselves, and do not intermarry much with the other natives. They are the most stupid natives we have ever met; in fact, many of them seemed to be absolutely weak-minded. This stupidity has become proverbial in the neighbourhood, for an old saw runs, *nâs Balabîsh 'aqle mâ fîsh*, "The people of Balabish are without sense." The story goes that some men from the village sailed down stream, stole some sugar from Baliana and hoped to bring it home unobserved; they therefore towed the sacks in the water behind their boat, and on arrival were surprised to find no sugar. Mean-

[1] See *Atlas*, Flle. 10.

while, someone at Baliana being thirsty had drunk from the Nile and found it sweet, which raised the alarm, and so the thieves were tracked by the very means which they had hoped would cover up their crime. Anyone who has had dealings with them could quite believe the story true. Indeed, the whole of this triangular area and the narrow strip adjoining it, forming a sort of *cul-de-sac* squeezed in between the Nile and the desert, is an out-of-the-way place, and is noted for the stupidity of its population. A tale is told against the inhabitants of Awlad Yahia, at the bottom end of this district, which makes them out to be nearly as foolish as their neighbours of Balabish. The story goes that they, admiring one of the minarets of the famous mosque of Girga, came into town one night, put ropes round it, and proposed to draw it away to their own village, but naturally they were unsuccessful. The name given to another apparently ancient site in this neighbourhood, *Kôm-el-magânîn*, "Mound of the lunatics," just opposite Balabish, rounds off the unenviable reputation of the district.

The cemeteries of Balabish are situated just behind the southernmost of the Balabish villages, and lie on a triangular ridge in a vast torrent-bed. This is quite clear in the central view on Pl. I. The photographs are taken from the centre of the triangular ridge, and beyond its edge, especially in the central photograph, can be seen the great southern part of the low-lying torrent-bed stretching away to the next ridge, about level with the point of the arrow, which makes its southern bank. The points of the spurs forming the base of the great triangular ridge towards the cultivation are occupied by the pan-grave cemetery. One is shown in the photograph, and there are two smaller ones similarly situated on the other two points next to the north. They are not included here, as there was a long stretch of virgin desert between them; it was not easy to fit them in in an intelligible manner, and nothing was to be learnt from them as they were exactly similar in character to that here shown. They were very small, and there were no other cemeteries with them. From the southernmost of the pan-grave cemeteries the New Kingdom cemetery stretches back, filling up the whole area with closely-packed graves. As will be seen from the top photograph, the New Kingdom graves are confined to the southern part of the triangular ridge and hardly touch the two secondary mounds on the northern side. It was on the western ends of the two secondary mounds, the eastern beginnings of which are seen at the bottom of the top photograph, that the two small groups of pan-graves were situated in an isolated state. There is no sharp division between the southernmost group of pan-graves and the New Kingdom cemetery, though the graves of each class thin out as they approach each other. Considerably to the south again there is a curious knoll rising like an island out of the torrent channel (see central photograph, Pl. I.). This had been filled with New Kingdom graves also. Practically all the New Kingdom graves had been worked out by the Government and native plunderers, leaving only the parts nearest to the cultivation, that is to say, the pan-graves and the New Kingdom graves nearest to them.

The Coptic cemetery lay a little to the north of the main cemetery, and in the cliff face of the great bluff in the top photograph were a number of rock-hewn tomb-chambers. They were uninscribed and had all been plundered. As the natives said that figures and boats had come from them, we suppose some of them to have been of Middle Kingdom date. Some were very small, and from the relics of their former occupants which had been pitched down the hill the burials in many would seem to have been of the late period. The potsherds of Coptic date lying about probably owe their presence there to a colony of hermits, though we found no Coptic inscriptions in the various chambers we visited.

As we found a pre-dynastic pot in one of the

pan-graves, we presume there must be a cemetery of that date in the neighbourhood whence the pot was borrowed. So far we have been unable to find it, and think it likely to be buried beneath the Nile mud which has encroached considerably on the desert.

Types of Tomb.

There was no sign whatever of any brickwork, superstructure, or mound over the pan-graves, the desert surface being quite hard and smooth. The great majority of the pan-graves were either round or oval pits, about five feet in depth. In this they differ entirely from the shallow graves found by Prof. Petrie at Hu,[1] whence he named them "pan-graves," but are similar to those which he excavated at Rifeh very much farther to the north, not far from Assiut. However, these cemeteries clearly all belong to the same class, so many and important are the similarities between the civilizations of the three sites, though each naturally presents some details in which it varies from the others. Thus we are able to take them as a whole.

There were three types of graves :—

1. Cylindrical pits of a very accurately circular section with contracted burials. Type 1, Pl. XV, and Catalogue Pl. XVI.

2. Oval pits also with contracted burials. Type 2, Pl. XV, and Catalogue Pl. XVI.

3. Long graves with extended burials. Types 3, 4, Pl. XV, and Catalogue Pl. XVII.

To which may be added :—

4. Deposits of objects in small irregular holes without burials. Catalogue Pl. XVII.

The graves of whatever type were practically all cut in the hard gravel of the desert, but B 214, 223, were cut down into the underlying marl. One of the circular graves, B 181, expanded below, making a section like that of a wide-necked bottle. Of the oval pits three, B 209, 232, 234, had sides which were practically parallel, but they were too few to form a class. B 232 had a wide shallow step at the southern end. It was 70 cm. wide, which would bring the total length up to 1·90 m., a length comparable to that of many of the long graves. It is possible, therefore, that this may be an unfinished long grave. Unfortunately it was absolutely empty, except for a chipped *kohl*-pot of blue marble and a few scraps of coarse leather.

The long graves were scattered among the round and oval ones, and on the southern ridge, where the pan-graves and those of the New Kingdom join, these long graves extended so as to meet those of the New Kingdom. In shape they were quite indistinguishable from those of the later date which had no chamber, and it was only possible to recognize them by the objects which came from them, or from the extraordinary state of preservation of the skin, which was a characteristic of the pan-grave burials. Two of these graves, however, had shallow lateral niches. In B 188 the niche was on the S.E. side, and in B 241 on the N.E. side.

The Burials.

In both the circular and oval graves which were sufficiently undisturbed to afford evidence the body was or had been contracted, lying on the right side with the head to the north and so facing west. The contracted burials the attitudes of which we were able to observe were arranged in the following manner :—

1. With the femora at about right angles to the body, and the tibiae tightly contracted, as in type 1, Pl. XV. This was the case in B 181, 220.

2. With the tibiae tightly contracted, but the femora at an obtuse angle to the body. Pl. XV, no. 189. This type was not found again.

3. With the femora and tibiae so arranged that the angles at the hips and knees were more

[1] These are similar to the latest C-group graves in Nubia, cf. *A.S.N.*, 1909–10, pp. 16, 138 ff.

equal, as in type 2, Plate XV. This was the case in nos. B 223, 224.

In the long graves the body was or had been extended, and strangely enough was twice lying on its face, in B 201, 238. Although it is possible that this was the work of plunderers in the case of B 201, the burial of B 238 was intact, with an unbroken coating of henna (?) paste about 1 cm. thick over the whole. Therefore this must have been the original position.

No. B 231 was lying on the back with hands on the pelvis. In every case in which anything like order remained, *i.e.* in B 184, 201, 231, 238, the head was regularly at the north end of the grave and the feet at the south.

The graves were oriented north or north-west very regularly, only B 220, 224 turning to the east of north. Thus the graves were no doubt following the course of the Nile, and were intended to be turned to the *local* north, which seems to have been judged by the direction of the river. Orientation to the north was adopted by the latest C-group people of Nubia, and began to appear in the earlier period.[1]

Whether the body had originally been made into a bundle and tied up in a skin we could not decide. There were generally remains of leather in the graves and often a great quantity. Scraps of leather cord also remained, hence the leather was no doubt tied up in a bundle. But whether this was just a bundle of leather, as in B 235 (Pl. XI, 2), where some cord still remains in place round it, or whether the body was tied up in a leather bundle, as is suggested by the bit of cord which remained on the leather covering at the neck of B 224, was not apparent. It is quite likely that it was customary to tie the bodies up in a bundle, for we understand this was done by the C-group people at Faras in Nubia, to whom our pan-grave people are related. It was also done in the proto-dynastic age, to which the pan-graves bear so much resemblance.[2] In B 201, 224, 239 the burial itself had certainly been *covered* with leather. The bodies had certainly been *wrapped* in woven material in B 201, 238, and possibly in B 235, where the ground was carpeted with woven material under which was a piece of mat. But this last had been so plundered that it is quite possible the covering material had been turned upside down into the position in which we found it. In B 181 the body had been covered with a thick layer of woven material. In B 181, 238, a mat had been laid over the whole, and probably also in B 235. From B 239 we obtained pieces of woven material covered with a mat, outside of which again were pieces of hide with the hair still on. In B 238 the layer of *henna* paste had been laid over the mat. The skin in this case was wonderfully well preserved and stained a dark red. This extraordinary preservation and dark coloration of the skin was characteristic of the whole cemetery. A good specimen of the state of preservation in which skin often was will be found on Pl. IX, 2. Such examples were also remarkable for their weight. Hence it is probable that some such preparation of *henna*, or of some other substance, had been used to preserve the body, though no remains of it were found elsewhere. On seeing this grave the men declared the substance to be *henna*, and this is supported by its effect on the skin. We submitted samples of the paste to the specialists at Kew Botanic Gardens, but they report that "it has been impossible either to identify henna leaves or to prove their absence... The paste certainly yields a yellow extract to water and to alcohol, but there do not appear to be any characteristic reactions whereby this colour may be identified as coming from henna. The chief difficulty lies in the fact that any henna which may be present has probably decomposed beyond either microscopical or chemical recognition."

[1] *A.S.N.*, 1909–10, p. 13.

[2] Petrie, *Tarkhan*, i, Pl. xxvi.

Mats had been used in B 181, 235, 238, 239. They were of two types :—

1. That found in B 181, 235 was made by arranging the reeds alongside of each other and piercing them through with others at some distance from each other. (Fig. 1.)

Fig. 1.

2. The type found in B 238, 239, in which the cross-pieces were again some distance apart but were arranged in pairs. The reeds forming the warp pass over and under, crossing each other between the members of each pair. (Fig. 2.) Probably each pair was fastened at the ends to keep it from splaying apart, but we found none showing the edges.[1]

Fig. 2.

Evidence for Date.

The pau-grave people are known from only a very few sites, and these are strictly confined to southern Egypt. The most northerly of their settlements hitherto discovered is at Rifeh, just south of Assiut. The other sites are Balabish about opposite Abydos, Diospolis Parva a little farther to the south, Deir el Ballas[2] opposite Quft (Koptos), and el Khizam[2] again a little farther south, and just north of Thebes.

In his original survey of the newly discovered pan-grave civilization Prof. Petrie assigned it to the Intermediate Period between the Middle and New Kingdoms.[3] At Balabish we found plenty of evidence corroborating his conclusion. A quantity of objects were found of Middle Kingdom or Intermediate style, such as blue marble *kohl*-pots, axes, red rimmed and red painted *situla* vases. We did not find any of the pre-XIIth Dynasty button-seals, such as are sometimes found in the C-group graves in Nubia.[4] The absence of these early things is yet another proof that the pan-graves of Egypt only correspond to the later part of the C-group of Nubia. We looked anxiously for some evidence as to whether the pan-graves lasted on into the New Kingdom, but unavailingly. We had hoped to be able to distinguish between the long and round graves, expecting to find in the former signs of greater riches or more Egyptianization which might give some clue, but we were unable to do so. Nothing could be poorer than the two intact long burials B 231, 238, producing only a few shells and a string of beads as did the first, or three leather cords for anklets as did the second. On the other hand, circular grave B 226 (Pl. VI. 1), though utterly broken up and scattered, was among the richest we found, and the owner of circular grave B 181 was quite bedizened with a variety of beads, some of them gold. There may be some significance in the fact that both the axes of type 1 (Pl. XIII) came from long graves, while type 2 came from a circular grave. Of the six *kohl*-pots three came from long graves B 201, 207, 208, while two were found in circular graves B 219, 226. The sixth was from the doubtful grave with a step in it, B 232. Similarly other features characteristic of the whole were equally well represented in both classes of graves. For instance, leather with white beads stitched into it came from the circular grave B 219 and the long grave B 231. Pierced leather was found in the oval and circular graves B 213, 225, and in the long grave B 184. Of the curved strigils (?) type no. 8, one came from the circular grave B 239, another from the long grave B 201, while the provenance of the third was uncertain.

Thus the civilization is equally represented in both classes of graves.

The best evidence we obtained as to date came

[1] A fine example of this type of mat is photographed and published in P., *G.R.*, Pl. x, F.

[2] Reisner, *A.S.N. Bulletin*, no. 4, p. 12. Reprinted *A.S.N.*, 1908-09, p. 18.

[3] P., *D.P.*, p. 48.

[4] *A.S.N.*, 1907-08, Pl. 71, a, b, nos. 14-16, 36. Cf. p. 335. *A.S.N.*, 1908-09, Pl. 52, b, nos. 30-34.

from the black spheroid beads, and this, though negative, suggests that the pan-graves ceased about the beginning of the XVIIIth Dynasty. Black spheroids were common both in the pan-graves and in the New Kingdom cemetery. But when we examined them closely we found that, though the majority of these New Kingdom beads were of black semi-transparent glass, *no single glass bead was discoverable in a pan-grave. The pan-grave black spheroids were invariably of glaze.* The absence of glass was similarly striking in the case of the penannular earrings. Though glass was used for some of the small ones from the New Kingdom graves, this material was not used for the pan-grave specimens, which were of shell. The small one from B 220 (Pl. VII, 2) much resembled opaque white glass until examined closely, when its true nature was apparent. This absence of glass is fairly strong evidence that the pan-grave civilization had ceased before the use of glass for beads and ornaments had become common. As stated above, this had taken place by the latter half of the New Kingdom, and the use of transparent glass for beads is contemporary with the beginning of the XVIIIth Dynasty, for there is a large ball bead of this substance in the Ashmolean Museum bearing the name of Zeser-ka-ra (Amenhotep I), the second king of this dynasty.

Corroborative evidence that the pan-graves did not last on into the XVIIIth Dynasty is forthcoming from a study of the life history of the disc beads. As shown on p. 22, the white disc beads of ostrich-egg shell are very common in almost all ages of Egyptian civilization until the XVIIIth Dynasty, when they suddenly cease, and in their place we find great quantities of small disc beads of red, yellow or blue glaze. As the egg-shell discs are very characteristic of the pan-graves, it is evident that the civilization belongs to the pre-XVIIIth Dynasty group, and it is improbable that it runs on into the age that discarded these beads. Further, the XVIIIth Dynasty red, blue and yellow glaze discs are not found in the pan-graves, though perhaps the little bright blue beads of type 3 are their forerunners.

Now we know that the pan-grave civilization lasted as late as the XVIth Dynasty, because a scarab of the Hyksos king Sheshy of this dynasty has been found in one of its graves.[1] Also we know that the pan-grave civilization included Late Intermediate types of pottery, such as Buff 8, 9, Borrowed 3 (Pl. XIV), which afterwards became common in the XVIIIth Dynasty. Hence there can be little doubt that the civilization lasted on till late into the Intermediate age,[2] and certainly as late as the XVIth Dynasty, which immediately precedes the rise of the New Kingdom under the XVIIth Dynasty.

We therefore conclude that the dying out of the pan-grave civilization probably coincided with the rise of the New Kingdom under the XVIIth and early XVIIIth Dynasties.

The probable coincidence of the disappearance in southern Egypt of this rude and evidently warlike[3] people with the rise, also in southern Egypt, of the warlike kings of the XVIIth and XVIIIth Dynasties, such as Seqenenre and Ahmose, inevitably leads one to ask the question whether these kings are not merely transformed and Egyptianized pan-grave people. Such a transformation would be entirely parallel with the history of many families of Beduin and Ababdah of to-day, who settle along the edge of Egypt. The father is said never to throw off his love of the desert, and returns to it from time to time, but the son prefers the flesh-pots of Egypt to the rigours of the desert, becomes settled and Egyptianized, acquires property, and

[1] P., *G.R.*, pp. 20, 21.

[2] See Petrie's conclusions, *G.R.*, pp. 20, 21.

[3] We found three axes, bow-strings, three bracers or archers' wrist-guards, and arrows were found at Rifeh; and the Mazoi of Lower Nubia, from which country the pan-grave people also came, were drawn on for soldiery to assist in expelling the Hyksos (Griffith in Carnarvon, *Five Years Exploration at Thebes*, p. 37).

to all intents and purposes becomes absorbed by the *fellâḥîn*. We know nothing about these kings except that they arose in the South, presumably at Thebes, in the neighbourhood of the site of the large pan-grave cemetery of El Khizam.[1] However, Prof. Petrie sees a facial resemblance between them and the Barabra, and hence suggests that they came from Ethiopia.[2] They became the saviours of Egypt by casting out the Semitic Hyksos, and they incidentally built up a kingdom for themselves. This, then, would not be so dissimilar from the course of events under Piankhy and Tirhakah, where we know that warlike Nubians possessed of initiative set up as orthodox Egyptian Pharaohs, uniting the Two Lands in the case of Piankhy, or opposing the newest Semitic invaders, the Assyrians, in the case of Tirhakah.

There is, however, another Nubian tribe who might claim to be the progenitors of the royal line. This is the people of the black-topped cups with the flared rims and grey bands whom we discover in Egypt in the XVIIth Dynasty.[3] These people no doubt come from Kerma in the Dongola Province, and seem to be connected with the XVIIth or early XVIIIth Dynasties in their use of the large fly ornaments so well known under Ahmose.[4] Unfortunately we are still in the dark as to the sequences and details of the Kerma archaeology, which must form the foundation of any true view of this race; but, apart from the uncertainty induced by our present ignorance of the Kerma evidence, such indications as there are seem to point to the belief that those men were not the founders of the XVIIth Dynasty, but rather the Ethiopians whose advances gave so much trouble in the early part of the New Kingdom.

In the first place, they make their appearance in Egypt too late to have founded the XVIIth Dynasty. They are not found mixed with the pan-grave people as if intruding upon them, but their connections are with the Egyptians or XVIIth Dynasty. See nos. 1, 3, 4, 6, 7, of the list on p. 43.

Secondly, just at the time that they are entering Egypt we find that the Pharaoh Kamose knew of a kingdom in Ethopia with which he seems to have had trouble.[5] The dynasty was not then newly established, as Kamose had at least three predecessors in the Seqenenres.[6]

Thirdly, we can hardly separate this fact from the statement made under Ahmose, Kamose's successor, that "there came an enemy (?) of the South,"[7] which shows that attacks were still continuing.

Fourthly, each of the kings of the early XVIIIth Dynasty had to conduct expeditions against Nubia, each apparently penetrating farther south, until at last Tuthmosis I reaches Tombos, just above the Third Cataract in the neighbourhood of Kerma.[8]

Thus, from both archaeological and written sources, the aggression of Ethiopia seems to belong to a later phase than the disappearance of the pan-graves and the formation of the XVIIth Dynasty.

Further than this, the graves in Egypt seem too few and isolated to have been those of a race of conquerors who established one of themselves on the throne.

[1] *A.S.N. Bull.*, no. 4, p. 12, reprinted *A.S.N.*, 1908–9, p. 18.

[2] Petrie, *History of Egypt*, ii, p. 4.

[3] See further p. 52.

[4] MacIver and Woolley, *Buhen*, Pl. 51; Reisner, *Ä.Z.*, 1914, Taf. iv; Bissing, *Thebanischer Grabfund*, vi, 2, 3, a.b.

[5] Griffith in Carnarvon, *Five Years Exploration at Thebes*, p. 36.

[6] B., *A.R.*, ii, § 7; Petrie, *History*, ii, pp. 5–7.

[7] B., *A.R.*, ii, 15; Sethe, *Urk.*, iv, 5.

[8] Kamose and Ahmose are figured at Toshkeh (Weigall, *Antiquities of Lower Nubia*, Pl. lxv, 4), north of the Second Cataract. Amenhotep I, their successor, reached a little farther to the south, but is not known beyond Uronarti, just south of the Second Cataract (B., *A.R.*, ii, § 38), while his successor Tuthmosis I set up an inscription and built a fortress on the Island of Tombos just above the Third Cataract (B., *A.R.*, ii, 67, 72).

CHAPTER II.

TOMB GROUPS (PAN-GRAVES).

Plates II, III, IV, VI and VII.

PLATE II, NO. 1. TOMB GROUP B 110.

THE saucer is of the ordinary New Kingdom type of rough brown pottery. It has been rubbed down to its present size from a larger vessel, as an inspection of the edge shows. A small hole has also been knocked in the bottom. The beads of the first string are of types 2, 17, 18, 19, in the second of types 1, 1 B, and in the third mostly of type 3. There were a great number of shells. Those shown in the Plate are mostly *Nerita sc. polita* (type 2). For a full list of the types represented see the Catalogue of Graves on Pl. XVI. In the lowest row on the left are two small palettes of stone with a pink pebble rubber; in the centre is a curious stone notched at one end, which has a few longitudinal scratches on it, but no clear sign of having been used as a palette; next is a black-topped pot-sherd which had been rubbed down into an oval shape to serve as a digger or scraper (?); and lastly, a very thin plate of copper or bronze of undetermined use. This last seems too thin to serve any practical use, and hence would appear to be a personal ornament, though it is not pierced for suspension.

PLATE II, NO. 2. TOMB GROUP B 208.

A very fine group, coming from a full-sized long and deep rectangular grave, which had been utterly plundered. For plan see Pl. XV, no. 3. All these objects were found in a pile against the eastern wall of the grave. On disturbing the sand a very strong scent of ointment, similar to that of the pre- and proto-dynastic age, was observed, though none of the pots contained any of the material.

The pottery types accompanying the objects will be found on Pl. XIV, H 5, Buff 2, 3, 7, Borrowed 2, 4, 5, 10. It is a curiously mixed lot, in that it includes a true pre-dynastic pot of type D 5 b and the little saucers or covers Borrowed 4, 5, 10, which might belong to any age. No. 5 especially gives evidence of its secondhand origin in being nothing but the base of an old pot, which has been rubbed down round the edges to accommodate it to its new use as a cover to a jar of type Buff 7. It has also been notched on the edge. For comparison with the cover no. 10 the reader should refer to *The Labyrinth, Gerzeh and Mazghuneh*, Pl. xviii, 55. No. 4 is made of the ordinary brown pottery of the New Kingdom and is blackened inside. There is nothing to notice individually in the representatives of the Buff ware from this group, therefore they will be treated with the rest of their type. A good example of type Buff 7 will be found photographed on Pl. V, 1. The pre-dynastic pot is of the clay usual to the pots of this D class, but has turned an exceptionally yellow-green colour owing to its having been over-fired. This colour, though unusual, is found from time to time in the D pottery of the pre-dynastic civilization. The presence of this pot in a pan-grave should be compared with that of the pre-dynastic potsherds, evidently also of type D (no. 67c probably *Naqada and Ballas*, Pl. xxxv), which were found in grave 72 : 218

of the Nubian C-group.[1] In neither case was there a pre-dynastic cemetery near from which these pots could have been accidentally transferred by plunderers. Twice again pots of pre-dynastic type are recorded in C-group graves,[2] and yet another has been found by the Oxford Expedition to Nubia in the C-group cemetery at Faras, which will be published shortly. The bowl H 5, which is photographed in our group, was a very fine specimen of its class, and the only perfect example which we found. The other side of it will be found in Pl. V, 2. The *kohl*-pot is of blue marble, a substance characteristic of the Middle Kingdom, but not unknown in the early New Kingdom, in which horizon we found it at Sawamah.[3] This specimen belongs to the most common of the pan-grave types of *kohl*-pot, no. 13 (Pl. XIII), though the workmanship of the neck differs from that of the drawn specimen and approximates to that of type 14. For the shells see further, p. 18. Here it need only be mentioned that they are *Cypraea* (?) *pantherina*, type 17; *Malea pomum* (probably), type 18; *Strombus*, sp. uncertain, type 19; and *Charonia tritonis*, type 20; besides which there is a smallish shell of the *Conus* species with a hole in the end of it, shown in the plate near the piece of webbing. This latter is perhaps a belt. Beside the small shell are two small black pebbles, and on the lower row are three bone awls or borers.

Plate III, no. 1. Tomb group B 185.

The only example we found of a prepared ox-skull. With it was the ram's horn. There were no other objects in the grave except relics of a male skeleton, as the whole had been plundered and scattered. As usual, the skull of the ox had been cut away, leaving little but the frontal bone, much as stags' heads are cut to-day for hanging on a wall to display the antlers. The skull was spotted black and red as usual. The marks are just discernible on the left-hand side of the skull. This custom of hanging up ox-skulls goes back to pre- and proto-dynastic times,[4] while that of colouring the bones is more in keeping with Mediterranean custom, though differing essentially from it. In the Mediterranean area it is human bones which are so treated, not animal bones, whereas even in pan-grave times the human bones are never so treated. Moreover, black does not seem to have been used for the decoration of the Mediterranean bones, though this colour is one of those regularly used on the pan-grave ox-skulls. It is strange that this custom, which might be connected with those of the Mediterranean area and which is quite unrelated to anything else in Egyptian civilization, should be found only in the southern part of Egypt and only at this one definite period of history. Besides this, it forms part of a civilization which otherwise seems to have little or no connection with the north, as up to the present it has not been found north of Assiut,[5] and which did not draw its marine shells from the Mediterranean but exclusively from the Red Sea, and which is again connected in many ways with the civilization of Nubia in the south. On the other hand, northern influence is evident in the small vases of black punctured ware of Mediterranean origin which have been found in the pan-graves of Hu and Rifeh. The pan-graves are also contemporary with the domination of the Hyksos, a race no doubt hailing from Syria. But if it was they who introduced the custom of colouring animals' heads, we may well ask why the habit is not found all over Egypt.

[1] *A.S.N.*, 1908–9, p. 83.

[2] *A.S.N.*, 1908–9, p. 160, no. 11; *A.S.N.*, 1909–10, p. 132, no. 360.

[3] See also Garstang, *El Arabah*, p. 29; Currelly, *Abydos*, iii, Pl. lix, 5, 6.

[4] P., *D.P.*, p. 18.

[5] P., *G.R.*, for a cemetery in this neighbourhood.

PLATE III, NO. 2. TOMB GROUP B 201.

From a long grave. No. 1 is a curious horn object of concavo-convex section, as is shown on Pl. XII, 6 (see further, p. 31). Next to it are several scraps of fine leather, dyed red, with little blue beads of type 3 stitched on. No. 2 is a delicate tortoise-shell bracelet of flat section, for which see Pl. XX, 10. This delicate flat section seems to occur in the C-group tortoise-shell bracelets (?) from Nubia.[1] But here the resemblance ceases, as these latter are penannular in form, whereas ours is a ring cut out of the solid piece. No. 5 is a penannular object of horn of flat section, shown as no. 5, Pl. XII. No. 6 is a curved horn object of concavo-convex section (a strigil?), shown as no. 8, Pl. XII. It is no doubt the remains of another specimen of this type. No. 7 is a copper casting of the forepart of a kneeling ram (see better Pl. XIII, 3), the hinder part being merely a bar of square section. It is a secondhand object, as the bar projecting from behind is broken off short.

The axe, no. 8, was still fixed into a slot in the remains of its wooden handle, but there were no signs of binding having been used, such as remained on the other axe-head from B 226, Pl. VI, no. 1, and on the similar Ahmose axe. Perhaps it had been fastened by two collars slipping over the projecting ends, as was so often the case.[2] No. 9, the *kohl*-pot, is a variety of type 14 (Pl. XIII). It is made of alabaster, and has been provided with a lid roughly modelled in pottery, and too small for it. This custom of providing a new lid to a *kohl*-pot was observed in the New Kingdom grave B 34, where an alabaster *kohl*-pot had been provided with a black serpentine lid which was too small for it. No. 10 is the string of carnelian barrel beads which figures again in Pl. VIII as string no. 12. The single melon bead at the end shows up well again here. These beads come from the neck. No. 11 is one of the bundles of yellow sinew. This might well be the archer's bow-string, the more so as the sinew seems too stout for use in stitching. Other sinew of a similar nature was found in B 179, but with no other objects beyond the usual masses of leather. We found no traces of wood which might have represented the bow. Beside the sinew is a knot of leather. No. 12 probably represents another portion of the warrior's panoply. This is a piece of leather or hide of triangular shape with two fine leather cords spanning the back (see also Pl. XII, nos. 1, 2). Another came from one of the other graves which produced an axe, B 226, while yet another was found in B 235, which did not yield any other objects of a martial character. There can be little doubt that these objects are the archers' wrist-guards or "bracers," used to save the skin of the left forearm from the chafing of the released bow-string.[3] In both the pots from this grave (Pl. XIV, Buff 1, 6) there was a strong scent of ointment, though none of the unguent actually remained. The surface of these pots was of the silky, rather greasy, texture which is associated with the cylinder pots of the Ist dynasty. Pot no. Buff 1 had had a mud stopper.

PLATE III, NO. 3. TOMB GROUP 222.

From a circular grave in which everything was scattered. Among the objects collected from the filling were the shell strips forming a bracelet, which from the regular gradation of the parts seems fairly complete. The beads in the lowest row are of type 3, in the middle row of type 9, while the others are of types 1, 6, and 12. With them was found the ankle-strap from a sandal. By the binding on it it allies itself to the sandals of tomb group B 226, which a reference to Pl. IX will show to be sandal-type 1.

[1] *A.S.N.*, 1908–9, Pl. 37c, 9.

[2] P., *D.P.*, xxxii, 21.

[3] For full discussion see Chap. V.

PLATE IV, NO. 1. TOMB GROUP B 212.

From a circular grave utterly plundered, with no bones left. In the filling were found the small saucer of *qulleh* ware with a hole pierced in the bottom, an oval potsherd used as a digger or scraper, and the small footed bowl, which was painted red. There were also four pieces of white material, presumably shell, of which two pieces appear on the right-hand side of the photograph. They were very much perished, and to-day resemble nothing so much as the cuttle-fish bone given to canaries. Below are several flint flakes, the only ones found in the pan-graves. Below these again are pieces of spongy metallic-looking haematite. There is also a piece of stone which the authorities of the South Kensington Natural History Museum find on examination to be sandstone stained green with copper. It may have served as a cheap substitute for malachite. On the extreme right will be seen a piece of red haematite, which has been much rubbed down on all sides for use as a pigment Samples of the haematite as well as of the malachite were submitted to the authorities of the South Kensington Museum, who vouch for the materials. To the uninitiated observer the spongy haematite looks much like the dross or scoriae from a smelting furnace which still contains a large percentage of metal. In the middle are two awls, one of bone, the other of copper or bronze, hafted in a small wooden handle now much decayed. There was another similar implement, of bone and broken. It is represented among the spatulae or hair-pins of Pl. VII, no. 4. The awls are probably for boring leather, since implements similar to the copper one are being used for this purpose in the scenes from the tomb of Rekhmire.[1] A number of the shells found are figured, also the beads. Those in the short strings in the upper row consist of type 3, those in the middle row are of type 1, while the lowest row of all is a string of similar shell disc beads, but in an unfinished state. This figures among the types in Pl. VIII as string no. 18. In the same plate, no. 2, is a group of these unfinished beads which have not yet even been bored.

[1] NEWBERRY, *The Life of Rekhmara*, Pl. xviii.

PLATE IV, NO. 2. TOMB GROUP B 213.

From an oval grave, perhaps that of a woman, as short plaits of hair were found in the filling, though the bones were sexed as male. The hair does not of necessity imply that the wearer was a women, for in the Nile lands men are accustomed to braid their hair, and, strange as it may appear to our notions, plaited hair is a sign of valour. King Theodore of Abyssinia is described as having "his hair arranged in large plaits extending back from the forehead."[2] Until very recent years "the young soldiers [in Abyssinia] were not allowed to plait their hair until they had killed a man." Then they increased the number of plaits in proportion to the number of enemies slain.[3] Although the custom has now died out among the warriors, it is still found among those occupied in the dangerous profession of elephant-hunting. These men often arrange their hair like the other Abyssinians, but sometimes "ils les divisent en un grand nombre de petites nattes qui pendent autour de la tête, et mesurent parfois 25 ou 30 centimètres de longueur."[4] This custom may have been used in ancient Nubia, for the *nebed*-haired are named by Tuthmosis I, III, and others.[5] This name is usually translated "the curly-haired," but Miss Murray has shown[6] that

[2] DUFTON, *A Journey through Abyssinia*, 1867, p. 98.

[3] VEITCH, *Views in Central Abyssinia*, 1868, no. 38.

[4] JEAN DUCHESNE-FOURNET, *Mission en Éthiopie*, 1901–3, ii, p. 295.

[5] SETHE, *Urk.*, iv, 84 = B., *A.R.*, ii, 71 ; SETHE, *op. cit.* iv, 613 = B., *A.R.*, ii, 657, and the correction v, p. vii.

[6] SELIGMANN, *Some Aspects of the Hamitic Problem*, *Journ. Roy. Anthrop. Instit.*, xliii, p. 618, and BRUGSCH, *Dict.*, *nbd.*

it may be better translated "with braided or plaited hair." The Libyan sidelock may be connected with this. It is sometimes plaited and not merely twisted.[1] If Lepsius is accurate in this detail, it would be significant that some Libyans are shown[2] with hair in ridges (plaits?) running from the forehead back over the head, just as King Theodore's hair is described. The Egyptian lock of youth is often shown as plaited.[3] Thus the presence of short locks of hair in this grave is no criterion of sex. The pierced leather was found near the pelvis, as was the similar material in B 184. The presumption, therefore, is that it was in both cases the remains of a kilt. With it was found the charming little bag of woven elephants' (?) hair. A cup of black-topped ware, type B 2, and also a piece of a bowl of red polished ware, type Borrowed 1, were found, as was the piece of curved horn, no. 9 on Pl. XII. Other objects found here were pebbles, small blue beads, and pieces of leather. Attention should also be called to several large black feathers, possibly the wing or tail feathers of a crow or some such bird. We had supposed that they had been introduced by accident while the grave was open at the time of the plundering, but we find they also occurred in three C-group graves in Nubia,[4] all of which, like the present tomb, contained male bodies. Mr. Griffith tells us he has also found feathers, though apparently of a different sort, in C-group graves at Faras in Nubia. There would, therefore, seem to have been a custom among this people of burying feathers especially with men. In the second of the Nubian graves quoted, pierced leather was also found with the feathers as here. This grave belongs to cemetery no. 58, of mixed C-group and New Kingdom graves, and though this grave, no. 121, is classed as of the latter date, there seems nothing to prevent its being an extended C-group burial.

[1] Bates, *The Eastern Libyans*, p. 135.

[2] *Denkmäler*, iii, 136a.

[3] For instance, Prisse, *Histoire de l'Art Ég.*: Portrait de Ramsès Meiamoun, &c.

[4] *A.S.N.*, 1908–9, p. 58, no. 108, where they are stated to have been black, p. 60, no. 121, p. 64, no. 1.

Plate VI, no. 1. Tomb group B 226.

From the filling of a circular grave. A pair of the fine quality sandals, type no. 1 (Pl. IX, 1), the leather of which was beautifully white and soft, being almost of a silky texture. The upper side of the sandal was ribbed with cross lines tooled in the leather, and had a narrow margin or welt marked by a tooled line. The leather binding of the ankle-strap shows up well. The wrist-guard or bracer referred to on p. 30 is unornamented, except for the lotuses in the corner, and has been fastened by two fine straps instead of the leather cords used in B 201. As in that grave here again the bracer is found with an axe. This axe is quite different in type from that of B 201 (cf. Pl. XIII, 1, 2). It seems to have been set in a much thicker handle, and there was perhaps a difference in the method of fastening, for while there is no sign of lashing on B 201, B 226 preserves a fine lashing of hide practically complete. (See further, p. 32.) Once again we have to notice the smooth pebbles, this time of green stone. The pointed one (see also Pl. XIII, 15) might almost be a sharpener. One of them, no. 18, Pl. XIII, had been used as a palette, though no sign of paint remained. The other two gave no signs of wear. Other objects found were a pair of copper tweezers, splayed out at the ends (see Pl. XIII, type 4) and ornamented with a couple of cuts on the sides. A broken *kohl*-pot, perhaps of type 13 (Pl. XIII), a few beads of type 1, fragments of two black-topped bowls types B 1, 3, and the leather recorded in the catalogue on Pl. XVI.

Plate VI, no. 2. Tomb group B 227.

From the filling. A pair of the good quality sandals, type 1 (cf. Pl. IX, no. 1), but not so fine as those of the previous group. They have no lines tooled on the surface. As in the last

case the ankle-straps have been bound with leather, though the binding has disappeared, except for a small fragment on the left sandal. (See further, p. 25.) Between the sandals are the beads, consisting of types 1, 12, 13, white disc beads and spheroids of carnelian and green felspar. Besides these there is a curved horn object, pointed at each end, and of a concavo-convex section, of which we found several (see Pl. XII, 8). We can only suggest that it might be a species of strigil. This instrument was used in antiquity by the Greeks and Romans, and to-day the Kaffirs scrape off the sweat with a sharp-edged bone implement, though not of this shape, but more like the blunt-pointed bone objects on Pl. VII, fig. 4. Perhaps our examples may be ancient representatives of the "thin curved skewer, of hard wood or ibex horn, thrust through his hair," which the desert Hamite, north of Port Sudan, wears to-day;[1] but it is impossible to be certain, as no further details are given. An iron strigil of the classical shape, but probably of XXVIth Dynasty date, was found at Tell el-Yahudiyeh.[2]

PLATE VII, NO. 1. TOMB GROUP B 220.

From a circular grave with a male skeleton. A black-topped bowl of red polished ware, type B 2, see also Pl. V, no. 2. A number of calcite crystals, among which will be found one of the several shells of type 2 which we found. A tiny penannular earring of shell. Another, also of shell but much thicker, was found in grave B 236. White shell disc beads type no. 1. There were also a few of the tiny blue beads type 3.

PLATE VII, NO. 2. TOMB GROUP B 239.

From the filling of a circular grave. A rounded potsherd of *gulleh* ware used perhaps as a scraper or digger. A piece of leather wrapped on to a piece of wood of semicircular section, which, apart from the shape of the wood, might have represented the hafting of an axe. A flat oval pebble used as a palette or grinder (?). Pieces of plaited leather-work, now not flat but rolled together, suggesting that they had been used as cords. A piece of rope made of three strands of twisted leather.[3] A piece of a curved horn implement of concavo-convex section—a strigil? See also Pl. XII, type 8.

A nail-shaped rod of calcite, 58 mm. in length and 9 mm. in diameter. It draws towards a point at one end and is shaped into a head at the other end. It can hardly be other than a lip-stud, an ornament much in vogue in the Sudan both in modern and ancient times. On the other hand, it is not impossible that it might be an ear-stud. Most unfortunately it was not found in place, as the grave was utterly plundered, and it, like the few fragments of bone, was found loose in the rubbish. Such an ornament as a lip-stud is entirely foreign to Egyptian ideas, and forms the strongest connection found by us between the pan-graves and the south. There had evidently been some copper in this grave at one time, for the bones of the pelvis were stained green. Besides a quantity of coarse brown woven material, there remained fragments of a mat of the technique shown in Fig. 2 above (p. 5). These scraps of the mat adhered both to the woven material and to pieces of leather from which the hair had been removed. Hence it would appear that the body had been covered with a woven material, upon which had been laid the mat and then a tanned skin. Other objects were a tubular bead, type 25, of fine glaze and of a light blue colour, and a few fragments of black-topped pottery.

PLATE VII, NO. 3. TOMB GROUP B 182.

From a small irregular hole in the ground roughly triangular in shape and without any

[1] C. CROSSLAND, *Desert and Water Gardens of the Red Sea*, p. 24. [2] P., *H.I.C.*, Pl. xxi, 8, and p. 19.

[3] Cf. the C-group cordage reported *A.S.N.*, 1907–8, p. 54, no. 174.

signs of a burial. The curved horn object is another of the strigil-like implements, highly decorated with incised patterns, as will be seen from the drawing on Pl. XII, no. 7. It has been bored with two comparatively large holes near the end, each about a quarter of an inch in diameter. It was originally longer and had been mended with a copper strip, but the broken part has again been broken off and has now disappeared. It came from the south end of the hole, and near it lay the horn bracelet (see also Pl. XII, no. 5, and p. 31), made of a plain horn bent round until the tip and butt met. The few beads were white discs of type 1 and had once been sewn into leather. In the centre of the hole was a pot of Buff ware, type 9 (Pl. XIV), full of ointment scented like that of the pre- and proto-dynastic age, and wrapped up in woven material. The pot is exceptionally green in colour and is now very much stained with the ointment. The presence of the beads which had once been sewn into leather suggests the possibility of this deposit representing a plundered burial; but this seems hardly possible owing to the smallness and shallowness of the hole, which completely differentiate it from any of the the graves. Moreover, the pot was standing upright in the centre of the hole and occupying most of the room, and it can hardly be a chance that the only other hole of a similar nature, B 223, also contained a large pot of the same ware, type 7 (Pl. XIV), also full of the same ointment. This pot was sealed, and nothing else was found with it.

The ointment is entirely similar to that found in the pre- and proto-dynastic period, as at Naqada and Ballas and Tarkhan. In the New Kingdom cemetery at Balabish the same scent emanated from a black polished jug no. B 66 and a false-necked amphora no. B 87. When found the ointment is a beautiful clean yellow of the colour of butter and of a crumbly consistency. If exposed to the hot Egyptian sun it will melt. On such occasions it exudes a dark brown treacly substance, and the remainder looks fairly white and like beef dripping. In fact, in this condition it looks very like cold gravy. It is greasy to the touch and comes off on a finger rubbed on it. It still retains a very strong aroma, so that on opening a plundered grave in which it had been deposited, its quondam presence is announced by the strong odour noticeable, even when none actually remains in the pots. Such was the case in B 208. Ointment or traces of it was found in B 182, 182A, 201, 208, 233, 240.

The question of its nature proves to be one of extreme difficulty, no doubt owing to the disappearance of the more volatile parts. It was impossible to make a satisfactory analysis of the first examples found,[1] and the suggestions which the analyst put forth led to much archaeological improbability. Hence the riddle remained unsolved. Three years ago one of the present writers brought home samples of the same early date from Tarkhan, and submitted them to Dr. Goodbody, of University College, London. He very kindly went to great trouble over the enquiry, but likewise was unable to obtain definite results. This year we have submitted samples of the pan-grave age both to him and to Dr. Williams of the British Medical Association, and hope that at some later date we shall be able to publish an analysis which will give definite conclusions. In the meantime we offer the suggestion that the substance may be some preparation of balsam or nard, the two perfumes most in favour in classical times at any rate, both of which are continually said to come from Syria or Judea.[2] Of the two, nard is the less

[1] See P., *N.B.*, pp. 11, 39.

[2] Pliny, xii, 25 (54) says that balsamum "has been only bestowed by nature upon the land of Judea. In former times it was cultivated in two gardens only."

Strabo, C 763, speaks of Jericho as being "encompassed by a mountainous district which slopes towards it somewhat in the manner of a theatre. . . . Here also is a palace and the garden of the balsamum."

Diodorus Siculus, ii, 48, says that near the Dead Sea

likely, as it is only mentioned in the Old Testament in the Song of Solomon, which is of post-exilic date, though well known in the New Testament[1] and in classical times. The knowledge of it seems to have come from India,[2] and the Hebrew name *nerd* is said to be derived from Sanskrit.[3] Hence it probably was not used in the earlier ages. It had, however, probably existed undiscovered for a long time round the Mediterranean, for Pliny[4] says that the next best quality grows in Syria, a less fine quality in Gaul, and yet another in Crete. Balsam, therefore, would seem a more likely perfume to have been used in early days. The Hebrew word *bōsem*, from which balsam is said to be derived, is continually used in the Old Testament for spice, perfume, sweet odour, &c.[5] The collection of balsam was probably a very ancient art, as the incision in the bark of the tree might not be made with a metal tool, but only with one of sharp stone, or as Pliny adds, of glass or bone.[6] This cannot really have been necessary, as Pliny goes on to remark that for the less primitive art of pruning the trees an iron knife might be used.

It seems probable that our ointment, or its perfume, was obtained from Syria, for at both of the periods in which it is so much used Asiatic influences were at work in Egypt. In the earlier age it is sufficient to refer to the pear-shaped mace-heads, cylinder-seals, wavy handles to jars, and the importation of lapis-lazuli, while at the later time the Canaanitish Hyksos had actually invaded the land. If, however, it be supposed that the ointment was obtained from the south-east, then the balsam tree is found there also, being widely distributed over those coasts. That it should have been brought in such large quantities from the latter region seems unlikely, as it is absent from both the corresponding periods in Nubia.

However, we hope that definite analytical results will some day take the place of speculations such as these.

balsamum is produced in a certain hollow, and that it grows nowhere else.

Theophrastus, *Hist. Plant.*, ix, 6, says "balsamum is produced in the hollow about Syria."

Justin, xxxvi, 3, says that "opobalsamum is produced only in that country (Judea); for there is a valley which is shut in by continuous mountains as if by a wall in the likeness of gardens (camp in other editions), the space enclosed being about two hundred *jugera*, and called by the name of Ericus (or Hierichus, Jericho)." He then describes the opobalsamum trees, and speaks of the warmth of the sun in this valley, and remarks that the sun in that climate is the hottest in the world.

Now Schweinfurth has shown that the balsam of the ancients was, not as has generally been supposed Balm of Gilead, but most probably what is now known as Mecca balsam, produced by the *Balsamodendron opobalsamum*, a tropical tree widely distributed over the coast territory of Arabia, the adjacent isles, and S. Nubia (*Pharm. Journal*, April, 1891, p. 897). This has caused doubt to be cast on the classical statements that the tree grew in a country so far north as Judea, but it really confirms them. For the more detailed statements show that the part of Syria or Judea where it grew was a hollow near Jericho, evidently the deep Jordan Valley. Justin, who gives us the most complete account, describes the place as shut in by continuous mountains like a wall, which is a peculiarity of this valley. His reference to the extreme heat of the sun in the valley is also of importance, as the tropical heat of the Jordan Valley is well known to-day. In May a noon-day temperature of 105° has been registered; hence the land bears a "strange sub-tropical vegetation" quite out of keeping with its latitude (Ellis-worth Partington, *Palestine and its Transformation*, pp. 201, 229). Thus what is known to be only a tropical plant would have flourished only at the particular spot in Palestine to which it is so continuously referred by the classical writers. Josephus, viii, 6, 6, moreover, says definitely that it was transplanted from the districts in which it is now widely distributed, for he says, "we possess the root of that opobalsamum which our country still bears by this woman's (the Queen of Sheba) gift."

[1] Cf. John iii. 3.

[2] Cf. Pliny, xiii, 1 (2).

[3] Brown, Driver and Briggs, *Hebrew Lexicon*, p. 660.

[4] Pliny, *Nat. Hist.*, xii, 12 (26).

[5] Brown, Driver and Briggs, *Hebrew Lexicon*, p. 141, gives the references.

[6] Pliny, *Nat. Hist.*, xii, 25 (54); Josephus, *Antiqq. of the Jews*, xiv, 181; *The Jewish War*, i, 6, 6.

Tomb group B 181 (see Pl. XV, 1).

The tomb consisted of a cylindrical pit of diameter 0·95 m., and depth 1·65 m., cut in the gravel, and opening out a little below.

The body was contracted, lying on its right side with the head at 340° and faced west. Much skin remained, and the body was *covered* with a thick layer of woven material, over which was spread a mat of the pierced type. Under the head lay 9, perhaps as a pillow.

1. Pot of hard thick pinkish ware. Type Buff 8.

2. Black-topped bowl. Type B 6.

3. Strings of small blue beads at r. ankle. Type 3.

4. Double string of white disc and carnelian ball beads at l. ankle. Types 1a, 12.

5. Quantity of blue disc beads on r. and l. wrists, extending up to r. elbow, not so apparently on l. forearm. Type 3.

6. Short length of three chains of alternate blue and white beads on chest. Types 1, 2.

7. Double string of carnelian spheroid beads, interspersed with gold collar beads at neck. Types 12, 24.

8. A few blue and white disc beads on the fourth to seventh vertebrae from the sacrum. These had probably fallen down from 6. Types 1, 2.

9. Thick pad of leather with black wool on the inside under the head.

CHAPTER III.

SHELLS, AMULETS, BEADS, &c.

Plates VII, VIII, XIII.

Objects of Bone.

Plate VII, 4. Examples of bone spatulae or hair-pins (?) and bone borers. No. B 180 and that without a number are made from the *tibiae* of sheep, hence probably the others are also. These hair-pins are of a flat oval section, with blunt edges and points. Thus they are not unlike the strigils used to-day by the Kaffirs of South Africa and kept in the hair. That the pre-dynastic people were accustomed to keep sundry toilet objects in their hair is shown by the photograph B 378, P., *D.P.* Pl. vi. Only three of these spatulae were found, all of which come from circular or oval graves. Borers, like spatulae, were uncommon. They were found with other objects only in graves B 208, 212; cf. Pls. II. 2, IV, 1. The specially fine example shown in this plate was unfortunately an isolated object. Pointed bones, similar to those of B 208, were found in the Aahmes town at Abydos,[1] and would therefore be a little later in date than these. They are described as netting bones. None of ours had an eyelet-hole, as had an undated specimen from the Osiris Temple at Abydos.[2] Pointed bones are very rare in the pre-dynastic age,[3] as also is the use of leather, so it is possible that the one necessitated the other, and that these bone awls are for boring leather preparatory to receiving the stitches.

[1] *Abydos*, iii, Pl. lvii.

[2] *Abydos*, i, Pl. li.

[3] For the only specimens we know, see Garstang, *El Mahâsna and Bêt Khallâf*, Pl. iv.

Shells.

Plate VIII, 2. One of the great characteristics of the pan-graves at Balabish was the profusion of shells which came to light. Altogether twenty different species were represented. A type set is published on this plate, to which must be added the large examples on Pl. II, 2. The list of names, kindly supplied by the experts of the South Kensington Natural History Museum, is appended here. Types 17, 18, 19, 20, went straight to America, therefore it was only possible to submit the photograph for identication :—

1. *Spatha* (?) *rubens inv.*
2. *Nerita sc. polita*, Linn.
3. *Clanculus puniceus*, Phil.
4. *Sistrum tuberculatum*, de Blainv.
5. *Polinices sc. melanostoma*, Lamk. (half-grown).
6. *Conus* sp.
7. *Cerithium columna*, Scrob. (probably).
8. *Coralliophila sc. neritoidea*, Gw.
9. *Conus* sp. *inv.*

9*a*. do. do.

9*b*. do. do. (?).

10. *Cerithium ungosum*, Wood.
11. *Vivipara unicolor*, Oliv.
12. *Pusiostoma mendicaria*, Lamk.
13. *Arcularia* (?) *circumcincta*, A. ads.
14. *Columbella* sp.
15. *Conus* sp.
16. *Strombus fasciatus*, Born.
17. *Cypraea* (?) *pantherina*, Linn.
18. *Malea pomum*, Linn. (probably).
19. *Strombus* sp. uncertain.
20. *Charonia tritonis*, Linn.

Nos. 1, 11, are modern Nile species, and with the exception of no. 13, the rest are not Mediterranean but Red Sea or Indian Ocean forms. There is some doubt about the true locality of no. 13.

Of these types by far the most common was no. 2, both as regards the number of graves in which it appeared, and also the numbers by which it was represented. The large open shell, which was in such continual request in Egypt, was found here in the Nile species *Spatha* (?) *rubens*, type 1. The little *Pusiostoma mendicaria*, type 12, one has seen imitated in paste. Similarly a small *Conus*, such as type 9, is copied in jasper in the XIIth Dynasty,[1] and the Ashmolean Museum possesses a string of such shells in blue frit, also of this date. The carnelian and felspar shell beads of the XIIth Dynasty, recorded in *Riqqeh*, Pl. xli, 146, are also copies of small *Conus* shells (see Bead Cases of Edwards' Library). Many of the shells were bored for suspension, and in B 207 we found fragments of the leather thread on which they had been strung still remaining in place. But besides those which had been bored, there were many which had not been so treated. It would be supposed that these were stock in hand against the time when they should be required. But there was evidently a fondness for shells for their own sake, as is evidenced by the beautiful specimens from B 208 (Pl. II, 2). While the big *Triton* has had a hole pierced in it the other three have not been worked, but are in a state of nature. It would therefore seem that they had been treasured as valuable or sacred objects, and not as personal ornaments. The same might apply to the *Triton* shell, which is so large that it could hardly have been worn on the person. Was it hung up as a charm about the house or elsewhere by means of its suspension hole? Large shells, though of a different species from any of those here represented, had been sacred objects at a much earlier time, for two are sculptured on each of the three proto-dynastic Min statues from Koptos.[2]

From the same period comes the necklace of golden imitation shells.[3] Large flat mother-of-pearl shells of a discoid shape are not uncommon in Egypt. They often bear the name of Senusert, inscribed in the middle.[4] As they are often bored at the point, they were, no doubt, used as pectorals. Such a shell was occasionally copied in gold.[5] Shells of various species copied in gold formed an important part of the jewellery of the XIIth Dynasty,[6] and a large *Pinna* shell is reported as having been deposited with XIIth Dynasty pottery.[7]

A large shell was also found in the shaft-grave, with "Kerma-like," flared, black-topped cups,[8] and again in an XVIIIth Dynasty grave,[9] both at Abydos.

At Balabish we also found a string of white snail shells in the New Kingdom grave B 90.

On the whole subject of the use of shells, and the dating of the specimens, see the great mass of information published by Petrie.[10]

It is an interesting fact that no Mediterranean species is represented among these shells of ours. Though only natural for geographical reasons, yet it may one day prove of importance ethnologically. Except for the two Nile species, and the one doubtful species, they are all of Red Sea or Indian Ocean origin. A similar phenomenon

[1] Petrie, *Dendereh*, Pl. xx, p. 22.

[2] Petrie, *Koptos*, Pls. iii, iv, pp. 7, 8.

[3] R., *N.D.*, ii, Pl. 6, p. 139.

[4] See for instance Petrie, *Amulets*, Pl. xliv, 112, a, Pl. xiv, 112, c, d, p. 27, no. 112, where others are quoted, and dated to the intermediate period between the XIIth and XVIIIth Dynasties.

[5] *Riqqeh*, Pl. i, 4.

[6] de Morgan, *Fouilles à Dahchour*, 1894, Pls. xvi, xvii, xxii, xxiii, xxiv, 1894–5, Pl. xii.

[7] Engelbach, *Riqqeh and Memphis VI*, p. 2.

[8] P., *C.A.*, ii, p. 62.

[9] P., *C.A.*, iii, Pl. xii, 6, p. 30, no. 17.

[10] *Amulets*, pp. 27, 28, Pls. xiv, xv, xliv.

was observed at the pre-dynastic site of El Amrah,[1] where the great majority of all the shells are of Red Sea origin. Eleven are from the Red Sea, possibly thirteen, while three come from the Nile, and only two are from the Mediterranean.

It is surprising that the cowrie-shell should be entirely absent from the twenty species discovered at Balabish, the more so as it was such a favourite with the C-group people in Nubia, and was much worn in later times in Egypt, as it is down to the present day. The whole genus *Cypraea* is only once represented, and that questionably, in the large *Cypraea pantherina* (?) of B 208.

Amulets.

For a people who made so great a use of beads, the pan-grave people manufactured extraordinarily few amulets. In this they resemble the early pre-dynastic people. None are reported either in *Diospolis Parva* or in *Gizeh and Rifeh*, and in only one case, B 153, did we find a set, and then it only consisted of very few and of very inferior make. They are shown in photograph on Pl. VIII, 1, no. 16, and in outline Pl. XIII, nos. 7, 8, 9. In two other graves, B 183, 219 (Pl. XIII, 5, 6), we found single specimens, and except for the shells, which may also be amuletic, there were no others. They are all made of a poor quality glaze of a dark greenish-blue colour, and among them one notices the common fly, the Taurt figure, and a plain conical object, for which last see Pl. VIII. The other shapes are curious. On Pl. XIII there is no. 9 of thin section, which one can only imagine to be an axe-head of a type used in the XIIth Dynasty.[2] A number are known in our museums, and the Ashmolean possesses one from Dendereh, dated to the VIth Dynasty. Should our object actually represent a weapon, it could be compared to the model spear-head used as an amulet in the pre-dynastic age,[3] or with the model axe-head (?) and arrow-head (?) from Abydos, which are both unfortunately undated.[4] It might represent one of the curious pre-dynastic slate palettes of much this shape.[5] No. 5 is a difficult subject. It can hardly be a crude attempt at a sacred eye, as one is tempted to think, for it is marked with diagonal impressions and is pierced in one corner of the face. Similar amulets of this same glaze, and with diagonal impressions, are very common among those from El Mahasna which are now in the Ashmolean Museum. It was, therefore, a well-established type. The type of no. 6 is also well-established, for from El Mahasna again come quite a number of cylinders with similar rows of knobs and broad shallow impressions.

Beads.

Next to their fondness for shells the pan-grave people were remarkable for their love of beads. Beads were found in almost every grave and form a group to themselves, not bearing a striking resemblance to any other group. In a superficial way perhaps they more closely resemble the pre-dynastic beads than any others. This is due to the large preponderance of small disc and flat spheroid beads, though apart from carnelian and glazed crystal the materials are quite different, as is also the stitching of beads into leather. The black spheroid beads (types 8, 9, see strings 9 & 10 Pl. VIII), which resemble those of the New Kingdom graves, differ essentially from them, for while the pan-grave beads are all of black faience the New Kingdom ones are mainly of black semi-transparent glass in which the air bubbles are visible. It is very

[1] Maclver and Mace, *El Amrah and Abydos*, p. 49.

[2] N., *B.H.*, i, Pl. xiv, &c.; Garstang, *Burial Customs of Ancient Egypt*, fig. 165.

[3] P., *D.P.*, Pl. iv., p. 27.

[4] Petrie, *Abydos*, i, Pl. li, 2, 3, p. 23.

[5] P., *N.B.*, Pl. xlvii, 29; Ayrton, *Mahasna*, Pl. xv, 3.

noticeable that glass is entirely absent from the pan-grave material, and this makes a clearly defined cultural point. The commonest and at the same time the most distinctive classes of pan-grave beads are the white discs (type 1), and the tiny beads of bright blue glaze, which are very irregularly cut (type 3). Both these classes are sewn into the seams of leather to a large extent. Examples will be seen in Pls. X, XI of this use of the white and blue beads respectively, while on Pl. III, 2 will be seen another means of using them, by stitching them, not into the seams, but on to the surface of the leather, in this case a softly dressed leather of fine quality. However, they are also used in strings as in Pl. IV, 1. The habit of stitching beads into the seams of the leather is peculiar to the pan-grave people, and they admired the effect to such an extent that they introduced a double row instead of merely a single one (see Pl. X, 1). This seems to have been effected by the insertion of a piece of piping between the rows, as shown in section in

Fig. 3.

fig. 3, but we were unable to make sure that the leather was not merely pierced with a double row of closely placed holes into which the beads were inserted and sewn. On the under side this process would have raised edges quite similar to those of a piping, and through these edges the thread passed. The leather would not bear very much handling as it was perished. The beads were strung either on leather threads as in Pl. X, 1, or on some fibrous material as in Pl. IV, 1.

In several cases we were able to observe how the beads were worn. The large carnelian barrel beads (Pl. VIII, no. 12) were round the neck, as were the blue disc beads in B 210. In B 231 a string of black spheroids was worn round the neck (Pl. VIII, no. 9). The burial richest in beads, B 181, had small blue beads on the right ankle, and on the left there was a double string of white disc and carnelian spheroid beads (Pl. VIII, no. 8). On both wrists and extending up to the elbow on the right arm were a quantity of blue glaze disc beads. At the neck was a double string of small spheroid beads of polished carnelian interspersed with gold collars (Pl. VIII, no. 13). On the chest were signs of three strings of alternate blue and white beads. Between the fourth and seventh vertebræ from the sacrum were a few blue and white disc beads, but these had probably come from the chest, and do not represent a string at the waist. The wearing of a string of beads up the arm may be compared to the strange predynastic fashion of wearing beads on the back of the hand.[1] In connection with the wearing of beads it should be mentioned that in B 238 three leather cords were found bound round the ankle instead of strings of beads. The shell strips (Pl. III, 3) should be referred to here as, although not precisely beads, yet they come into the same category. They were found in graves B 96, 222, each time in small quantities. At Diospolis Parva[2] they were found made into bracelets, three of which were worn on the forearm. The strips are graduated in length as is seen in Pl. III, 3, whence it is evident there cannot be many pieces missing. This collection was much more complete than that from B 96, and when threaded it is of a convenient size for a bracelet or anklet.

Unless they should be found in considerably larger quantities than this, the pan-grave people cannot have used these strips to make pairs of bands crossing on the breast, as it appears the Libyans of the Vth Dynasty may have done.[3] The strips are small pieces of mother-of-pearl of varying fineness. They are bored at each end to receive a double thread, which, passing in opposite directions, keeps them edge to edge.

A list of types of the beads has been drawn

[1] P., *L.G.M.*, p. 22.

[2] P., *D.P.*, p. 46.

[3] Bates, *The Eastern Libyans*, p. 132.

up in connection with the collection of examples on Pl. VIII. The term "spheroid" has been applied to all beads with rounded sides but flat ends, whether they are thick as in fig. 4, or thin as in fig. 5, since in either case the form is that of a section of a sphere.

Fig. 4.

Fig. 5.

The thick ones thus approximate to the true ball bead, and the thinnest to the disc bead. The term "melon" refers to vertically furrowed spheroid beads, resembling a hot-house melon in shape. The term "collar" refers to short cylinders of wide diameter. They are made of very thin metal. They fit over the ends of the spheroid beads with which they are used, and thus correspond in metal to type 1A in shell, which has been hollowed to serve the same purpose. Similar, but much larger, gold collar beads, also used with hard stone spheroid beads (in these cases amethyst), were found in two tombs of the XIIth Dynasty at Wady Halfa.[1] Each type is described and is numbered for easy reference, and to each is added the numbers of the strings in Pl. VIII in which examples of that type will be found.

Disc beads.

Type 1. White discs, made almost certainly of ostrich egg shell. Strings nos. 5, 6, 11, 17. Unfinished specimens are numbered 2, 18 in the plate.

1A. White discs, hollowed out to take the spheroid beads. Strings 7, 8.

1B. Fish vertebrae used to supplement the white discs. Pl. II, 1.

2. Coarse blue glaze discs. String 5 in the centre.

3. Tiny brilliant blue glaze, very irregularly cut. String 15. No. 16 is similar, but of the dark greenish blue glaze. Pl. II, 1, third string, Pl. III, 3, third string.

4. Tiny black glaze, very irregularly cut. String 3.

Spheroid beads.

Type 5. Large crystal glazed blue. No. 1.

6. Small blue glaze. Strings 6, 7.

7. Small blue glaze, similar to last, but much flatter, approximating to disc beads. String 14.

8. Large black glaze. String 10.

9. Small black glaze. Strings 9, 10; cf. also Pl. III, 3.

10. Small blue frit. String 17.

11. Small red carnelian? String 17.

12. Small carnelian. Strings, 4, 6, 8, 13.

13. Green felspar. Pl. VI, 2.

Melon beads.

Type 14. Poor dark greenish blue glaze. Strings 12, 16; cf. also Pls. III, 2, no. 10, XIII, no. 11.

15. Black glaze. Pl. XIII, no. 11 (B 236).

Cylindrical beads.

Type 16. Large blue glaze. Pl. II, 1.

17. Large blue glaze, with black line spiralling round. Pl. II, 1.

18. Large black glaze. Pl. II, 1.

19. Large bad dark greenish blue glaze. Pl. II, 1.

20. Small bad dark greenish blue glaze. String 16.

Barrel beads.

Type 21. Large carnelian. Strings, 4, 12.

22. Small poor dark greenish blue glaze. String 16.

23. Small green felspar.

Collar beads.

Type 24. Gold. String 13.

[1] MacIver and Woolley, *Buhen*, Frontispiece to Text, and Pl. 87.

Drop beads.

Type 25. Large fine light blue glaze. B 239.
26. Small poor dark greenish blue glaze. String 16.

The white disc beads would appear to be made of ostrich egg shell. A large number of unfinished ones were found (Pl. VIII, nos. 2, 18), some of which were submitted to the experts of the South Kensington Museum of Natural History, who report that they are "almost certainly ostrich egg shell." It is evident from the unfinished specimens that small pieces of shell were chipped to approximately the right size, then bored with a blunt point, and finally the rough edges were polished down. For this process they might have been tightly threaded on a string which would thus give a sufficient surface of edges on which to work. With these were occasionally found small fish vertebræ of suitable size. These being of a whitish colour served the purpose very well, and were no doubt easier to procure than the shell discs, which were only produced after a laborious rubbing down and boring. It is very noticeable that these white disc beads cease abruptly on the rise of the XVIIIth Dynasty, but begin to come in again during the XIXth, and are found in the XXIInd Dynasty. They had been very common throughout the earlier periods, i.e. in the pre-dynastic, apparently not in the Old Kingdom, in the Intermediate Period between the Old and Middle Kingdoms, in the Middle Kingdom, and in the pan-graves. In the XVIIIth Dynasty, when they drop out, their place is taken by the new brightly coloured discs of red, yellow and blue glaze. After the novelty of these has worn off they begin to come into fashion again.

The ancient art of glazing crystal a blue colour was represented here in the large spheroid bead, type 5. It was the only example of this rare art which came to light. This probably constitutes another link with the pre- to proto-dynastic age, at which time this technique was most extensively employed.[1] Unfortunately this is not absolutely decisive evidence, as very occasional beads are known dating to the XIIth and XVIIIth Dynasties.[2]

Blue glaze was very common, in fact almost all the graves produced at least a few blue beads of the tiny irregular type 3. The colour of these was a bright blue of brilliant quality. Of a bright blue glaze were also some of the spheroids, and the large coarse discs, type 2, in which latter the glaze itself was of a coarse quality to suit the bead. In all these classes the glaze and colour were very different from those of the amulets and larger beads of string no. 16 in Plate VIII. The glaze of these amulets and beads was of poor quality and of a deep greenish blue, like that usually associated with objects of the XXIInd Dynasty. It was not a chance occurrence here, as these peculiarities are found again in graves B 183, 219. However, although this glaze was much in vogue in the XXIInd Dynasty and is distinctive of that age, yet it is by no means confined to it. It is found on pre-dynastic beads from Hierakonpolis; on VIIth Dynasty(?) beads from El Mahasna; on XIIth Dynasty beads both from Beni Hasan and an unnamed site; and in the pan-graves at Hu.[3] Perhaps it should be remarked that it is specially connected with many of the forms in which it is found here, that is to say, melon beads, type 14, drop beads, type 22, and the strange amulets nos. 5, 6 on Pl. XIII. It was especially prevalent in the

[1] P., *N.B.*, pp. 44, 45; *Hierakonpolis*, ii, p. 39; Petrie, *Abydos*, ii, p. 26, Pl. viii, nos. 171, 172, 174; see also Pls. vi, 63, vii, 84. A piece of proto-dynastic age from Faras in Nubia is in the Sudan Room at the Ashmolean Museum. The largest piece is the XVIIIth Dynasty sphinx (Maspero, *Guide to the Cairo Museum*, fifth English edition, p. 130), but this is of opaque quartz, not crystal, and is glazed white.

[2] See the bead cases of these dates in the Ashmolean Museum, and Edwards Collection.

[3] These can all be studied in the bead cases of the Ashmolean Museum.

material from El Mahasna of VIth to XIth Dynasty date. Hence, with regard to this quality of glaze, and to the melon beads themselves, and so many other details of Egyptian civilization, it must be realised that it is not peculiar to any given period, but that it has a long history, coming into greatest prominence in some one period, to which it is often (wrongly) said to be peculiar.

A cylinder bead, type 17, was found, of good blue glaze, with a black line winding round it in a spiral from end to end. This is a XIIth Dynasty type, and is perhaps a decadent imitation in glaze of the old gold beads of the predynastic age[1] and of the IVth to Vth Dynasties.[2] These again are probably related to such beads as those of the proto-dynastic age, which are made of gold wire coiled spirally.[3]

Black glaze was also much in fashion (Pl. III, no. 3, Pl. VIII, nos. 3, 9, 10), and, as has been remarked above, strikingly differentiates between the pan-graves and those of the New Kingdom, where similarly shaped beads are often made of black glass, more or less transparent, and showing bubbles in its substance. In tomb group B 222 (Pl. III, 3), these black glaze spheroid beads were found with similar beads of blue glaze. This combination was found again in the New Kingdom group B 108.

Blue frit was used in B 153 for spheroid beads, type 10, see Pl. VIII, no. 17. The use of this material is known as early as the XIIth Dynasty for spheroid beads and model *Conus* shells, both of which can be seen in the Ashmolean Museum.

Carnelian (Pl. VIII, strings 4, 12, 13, and Pl. III, no. 3, middle string) does not seem to have been in great request as a material for bead-making, but as the two most important graves B 201, 181, the latter of which was unplundered, both produced a considerable quantity of this material, it is quite possible that carnelian beads had once existed in the other graves also. The carnelian beads are of two types, spheroid and barrel, types nos. 12, 21, and vary considerably in quality, from the beautiful little spheroids, which are highly polished and well worthy of their gold collars (Pl. VIII, string no. 13), to the large rough ones figured as string no. 4 in the same plate. The barrel beads, string no. 12, had been quite good, but they are now very much chipped. This condition bears out the second-hand appearance of so many of the details of this civilization.

Green felspar (Pl. VI, 2, and also grave B 228) occurs rarely, and almost always as a spheroid bead, type 13. In Pl. VI, 2, felspar is seen to occur with similarly shaped beads of carnelian.

On the whole the hard stones so much affected by the XIIth Dynasty may be said to be noticeable by their absence, particularly amethyst and hæmatite. There is a corresponding lack of the favourite XIIth Dynasty large sized ball beads, whether in hard stone or glaze, which it might have been thought would specially appeal to a savage race, such as these pan-grave people appear to have been.

Gold was only found in grave B 181 (Pl. VIII, no. 13). The beads were in the form of little collars separating some of the carnelian spheroid beads. Their similarity to the gold collars of the XIIth Dynasty jewellery of Wady Halfa has already been referred to.

[1] P., *L.G.M.*, Pl. v.

[2] Garstang, *El Mahásna and Bét Khallâf*, Pl. xxxvii.

[3] P., *R.T.*, ii, Pl. i, 3, and p. 18; de Morgan, *Tombeau Royal de Négadah*, fig. 744.

CHAPTER IV.

OBJECTS MADE OF LEATHER.

Plates IX, X, XI.

Sandals.

Plate IX, 1. Sandals, or remains of them, were found in graves B 218, 222, 226, 227, 234, 243. All have one characteristic which distinguishes them from those of the New Kingdom, for they invariably consist of a single thickness of leather, and not several, as do the New Kingdom examples which we found. Moreover, they were all square or rounded at the toes, and never pointed, as so often in the New Kingdom. The New Kingdom sandal from B 170. Pl. XVIII. serves very well to illustrate both points. The leather of the pan-grave sandals is not reinforced by nails or by any other means. In types 1 and 3, which include the majority of the sandals, they were fastened by a toe-strap, springing from a single hole in the sole and passing back to a pair of loops at the ankle. How the strap was treated after this is not clear, and what evidence there is is not easy to interpret in the light of our knowledge of Egyptian sandals. In B 234 the toe-strap itself continues through the eyelet-hole in the ankle-strap, and, one supposes, must therefore finally either have been tied on itself over the instep, or have passed back to the hole in the toe whence it sprang. Both these arrangements would be contrary to those shown in the models,[1] and to those of actual specimens found in the XIth Dynasty temple of Deir el Bahri[2] and at Kerma,[3] and also to those of most of the drawings of sandals with a strap passing round behind the foot. In all these the toe-strap is separate from that round the foot, and ends in a loop on the instep through which the latter runs (fig. 6).[4]

The only true exceptions we have found to the general rule are the sandals carried behind Narmer on the great slate palette from Hierakonpolis.[5] Here, besides other minor variations from the general later type, the toe-straps do not exhibit any loop at the instep, but are themselves double (fig. 7). The fastening, therefore, is apparently carried out by a single strap

Fig. 6.

Fig. 7.

[1] Petrie, *Deshasheh*, Pl. xxxiv, 6.

[2] See Pl. X.

[3] *Boston Museum of Fine Arts Bulletin*, vol. xii, fig. 20.

[4] A study of a number of examples shows that unless more evidence be forthcoming such apparent exceptions as nos. 411, 414, 418 of Lacau, *Sarcophages*, Pl. 1, must be regarded as less detailed drawings of such sandals as are shown in Schäfer, *Priestergräber des Ne-user-ré*, fig. 73, Pl. xi. e, fig. 139, where the toe-strap is shown quite plainly to be separate from the strap which encircles the foot. It must be added that even if nos. 411, 414, 418 represented that which they seem to do, *i.e.* a single strap slit and passing through loops in the ankle-straps, such a system would not be applicable in our case, for the holes in our ankle-straps have never been open, as they are not looped but are eyelet-holes pierced in the strap itself. Thus they are only suited for the purpose of threading a loose end, and not for being fastened over an endless strap. These figures might, however, represent sandals in which the two ends of the encircling strap meet before passing into the hole at the toe. If so, they would represent that which we suggest to have been the method employed for our pair. However, the doubling of the part of the strap over the instep is never suggested at all, even in large drawings like those of N., *B.H.*, iv, Pl. xxvii. 1.

[5] Quibell, *A.Z.*, 36, Pls. xii, xiii.

starting from the toe of the sandal and running round the foot back again to the toe.[1] Further evidence can be adduced that this was the ancient method, by the fact that detailed drawings of the sign of life ☥ (*ʿnḫ* or ankh) show it double at the "handle" or loose end. Battiscombe Gunn has shown this sign to have originally represented the sandal-strap, and Gardiner[2] notes that it is difficult to make the Middle Kingdom representations of the sandals and the ☥ tally in detail. He explains the difference on the ground of the antiquity of the sign, and from the evidence of Narmer's sandals this is probably correct.[3] Thus from the details of the ☥ hieroglyph, or ancient sandal-strap, we get corroborative proof that the proto-dynastic sandal was fastened by one continuous strap springing from the toe, passing round behind the foot, and returning to the toe again. Hence it may be supposed that this was the means employed in the case of B 234. In other words, we conclude that the sandals of this early age were fastened in a manner different from the sandals of later times, but similar to that employed by the pan-grave people. This forms yet another connecting link between the pan-grave people and those of the pre- to proto-dynastic age.

The other sandals were probably also secured by a strap which passed round the foot rather than joining the sole below the ankles, for, besides being suggested by B 234, this was by far the most common method employed in pre-New Kingdom times. Out of twenty-six cases observed the strap passed round the foot in 16, joined the sole by means of the ankle-strap in 7, and joined the sole directly in 3. After passing through the hole at the toe the strap is secured beneath by a large knot, which, coming in contact, as it does, with the ground, must soon have worn through, besides being very uncomfortable in walking, as it formed a lump just under the toes. However, sandals were very little worn, and no doubt, like those of Narmer, often carried, even on ceremonial occasions, just as the modern *fellaḥin* very often carry their not over-strong red shoes to-day. In nos. B 222, 226, 227,[4] the ankle-straps had been bound round with a strip of leather, and no doubt this had been the case with all, as is suggested by B 227 (Pl. VI. 2), for here, though the binding has disappeared from the more perfect ankle-straps, yet a scrap remains on the one that has nearly perished. Nos. B 226, 234 had been tooled on the upper face with lines edging the outline, and with others running across the sandal. No. B 226 was of exceptionally fine quality leather of a silky texture, and was noticeably much whiter in colour than the others. In the coffin paintings the majority of the sandals are white, and they are often called "a pair of white sandals."[5] Horus' sandals are said

[1] The broad piece across the instep is no doubt some sort of guard to prevent the strap chafing. In later times the straps themselves were often made broad over the instep. Cf. especially the unusual sandal in NEWBERRY, *The Life of Rekhmara*, Pl. xvii, 3rd register.

[2] *Dictionary of Religion and Ethics*, "Life and Death," p. 21.

[3] The cross-pieces of the ☥ still offer a difficulty, for they cannot represent a bow-tie on the instep, as no such thing is ever found. From a study of originals, models, and drawings, it is evident that what looks like the end of a bow-tie on the instep of figs. 7, 8, 9 in Gardiner's article, is really the toe-strap and its loop to which the rest of the straps join. The cross-pieces of the ☥ should then be the ankle-straps, though placed a little far forward in the general scheme. In fig. 2 of that article they are actually shown as slit for the eyelet-hole and bound with a strip of leather, as were ours (cf. Pls. III, 3, VI, 1 and 2). Or we might by the analogy of Narmer's sandals explain them as some sort of a pad to relieve the instep. The line dividing the two straps at the toe is quite clear in Quibell's drawing (*Ä.Z.*, 36, Pl. xiii), and in the original photograph (*Hierakonpolis*, i, Pl. xxix). Its presence greatly increases the similarity between the ☥ and the ancient sandal-straps.

[4] See Plates III, 3, VI, 2.

[5] LACAU, *Sarcophages*, i, *passim*.

to be white in the Pyramid Texts.[1] In one of the coloured pictures of outfits for the dead man two pairs of sandals are shown, one of which is black and the other white.[2] Perhaps these represent an every-day and a better pair.

Type no. 2 of Pl. IX is very different from types 1 and 3, both in shape, manner of fastening, and quality of leather. It is square toed, is not shaped to fit the right or left foot, has two holes for toe-straps instead of one, has no ankle-straps, but is pierced with two holes towards the heel. It would, therefore, seem to have been fastened by two straps running from the toe to the heel, and perhaps crossing on the instep. However, we do not know exactly such a type elsewhere in Egypt, though it may be connected with the rather different sandals represented in the wooden model of Middle Kingdom date. Though this is not quite the same, for while having the two holes near the heel it has only one at the toe.[3] Again, it may be derived from some such type as the strange form dating to the beginning of the pre-dynastic period, S.D. 32.[4] This pre-dynastic specimen, however, is much more closely allied to the elaborate form adopted by Absha's Aamu in the XIIth Dynasty,[5] and to the unusual form of which only fragments remain,[6] and which from the style of dress is probably of Vth Dynasty date. With this sandal, B 218, was found the bundle of cords—a belt?—figured on Pl. X, 1.

Types of Leather.

We now come to the leather-work, examples of which in some form or other were produced by the majority of the graves, as a glance at the catalogue on Pls. XVI, XVII will show. It was often found in very great quantities, and is rather less prominent in the long graves than in the circular or oval ones. The leather had been well prepared and had every appearance of having been tanned, though we have been unable to get specimens analysed. In some cases the hair was not removed. The true (i.e., hairless leather) was of two qualities, the one thick and stout and the other thin and soft, like chamois leather. The surface of the thicker and stouter quality was, as a rule, quite smooth and good, as is evidenced by the skirt on Pl. IX, no. 2, and by the pieces on Pl. X. On some of the thick pieces which retained the hair a purple stain was noticed.[7]

Besides being used in the piece the thick leather was made into cords, as was also the thin, for the anklets in B 238, and for the fastening of the bracer B 201 (Pl. XII, 1). The soft thin leather was cut into fine strands and used for sewing. It was often dyed red. The stouter skins retaining the hair were much used in large pieces, and sometimes covered the body, as in nos. B 177, 179, where it was found in position, though true leather was also used for this purpose. This coarser quality, whether skin or leather, was undyed, but retained its natural colour. It seems to have been made from cow-hide as a rule, so far as one could judge from the hair and its colour. In B 179, which had the greatest range of varieties, the skins with the hair came from a red, a black, and a white-and-red cow respectively. Besides these skins with the coarser hair there were others with a finer slightly curly hair, mottled either black and white or else red and brown. Only one skin was found which could be attributed to a sheep, and that came from B 181, where a thick pad of leather with black curly wool was rolled up under the head, making a pillow.

[1] Sethe, *Pyr.*, § 1215, a.

[2] Schäfer, *Priestergräber des Ne user-rê*, fig. 83, p. 59.

[3] *Ibid.*, fig. 159, p. 100.

[4] P., *D.P.*, Pl. x, 19.

[5] N., *B.H.*, i, Pl. xxxi.

[6] Petrie, *Medum*, Pl. xxviii, 6.

[7] Cf. the C-group leather; *A.S.N.*, 1907–08, p. 295, no. 21, no. 222.

The finer leather of chamois type, mostly in very small pieces only a few inches square stitched together to make a large piece, was found in close contact with and following the creases of the stouter skins.[1] It had certainly lain under the latter at the time of burial, though, unfortunately, it was all too brittle and in fragments too small for us to see whether the connection were any closer. As a rule it came away quite freely from the skins, and it had certainly not been closely attached to them over its whole surface. However, in B 179, where we found a large piece, it had been sewn on to the skin, at one edge at least.[2] The other edge had disappeared. At first we took the finer leather to be the remains of a bag, but it would have been too large to have been convenient: therefore it is quite possible it was a lining to the skin, stitched to it only here and there.

This soft leather was sometimes ornamented with little blue beads of type 3.[3] A great deal of it was dyed red, notably in graves B 177, 179, 180, 201, 213, 226, 243, though only in one instance, B 183, was red dye used on a skin with the hair still on. One cannot but compare this fine red-dyed leather with the material of the long costumes worn by the Libyans (?) of Beni Hasan,[4] and painted a dull red colour, which evidently represents a similar leather. In the fifth century B.C. the Libyan women were still wearing a fringed costume of red-dyed leather from which the hair had been removed,[5] though they used goat-skins for this purpose. Though these fringes evidently formed the edge of the garment, as they are likened to the snakes on the aegis of Athene, they should yet be compared with the leather covered with fringes figured in Pl. X, 1, and again, to the sewn and fringed leather of the early pre-dynastic age in Nubia.[6] Probably, however, the scalloped edge of the XIIth Dynasty Libyan woman's robe at Beni Hasan corresponds best with Herodotus' description of thongs or straps. Still more similar are the more deeply-cut scallops worn by the pre- and proto-dynastic woman round the top of her garment.[7] Leather was also very common in the pre-dynastic and Old Kingdom graves of Nubia, where it was also used as clothing.[8] The Nubians of the XVIIIth and XIXth Dynasties wear a breech-clout made of skin with the hair still on it.[9] It does not appear that the pre-dynastic and Old Kingdom leather was dyed, though the art of dyeing was known in the early pre-dynastic age, as witnessed by a mat which was dyed red.[10] There exist pieces of leather of pre-dynastic or proto-dynastic age with patterns painted on them.[11] The long cloaks with designs, worn by the pre- and proto-dynastic female statuettes,[12] may be of such painted leather.

The joining of separate pieces of leather was effected in three ways:—

1. By a button-hole stitch passing over and over, and making a ridge at the joins.[13]

2. By laying one edge upon the other, when

[1] See Pl. XI, 1, and found again in nos. B 177, 213.

[2] Cf. Pl. XI, 1, especially the top right-hand corner.

[3] See Pl. III, 2.

[4] N., *B.H.*, i, Pl. xlv. These figures are generally taken to be Libyans on account of the feathers, no doubt, but they are very different from the usual representatives of these people. Appearing as they do in the XIIth Dynasty, just before the pan-grave people are known in Egypt, and wearing the pan-grave red leather garments, we may well ask whether these are not pictures of pan grave people.

[5] Herodotus, iv, 189.

[6] *A.S.N.*, 1907 08, p. 121, no. 21.

Capart, *Primitive Art in Egypt*, fig. 130, p. 168.

A.S.N., 1907 08, pp. 115 onwards.

Lepsius, *Denkmäler*, iii, Pl. 117; Budge, *The Egyptian Sudan*, ii, plate between pp. 324, 325.

[7] *A.S.N.*, i, p. 124, no. 81.

[8] P., *N.B.*, Pl. lxiv, 103, 104.

[9] Petrie, *Hierakonpolis*, i, Pl. ix.

[10] See Pl. XI, 1.

the two are tightly stitched together by a leather thread passing through closely placed holes. Fig. 8. Until unpicked the seam has the appearance of having been riveted.

Fig. 8.

3. By causing the two edges to overlap considerably, and fastening each down by a row of coarse simple stitches at each edge.[1]

As a rule the stitchery is very good, and how neat the resulting join appeared on the outside can be judged from the example in the top right-hand corner of Pl. XI, 1. The thread used consisted of very finely cut strands of leather, and, as no needles were found, the leather was presumably pierced by means of the bone and copper awls frequent in the graves.[2]

Various Objects of Leather.

Plate IX, 2. B 216, from a circular grave. A leather skirt found in position, the belt consisting of a cord wound three times round the waist. A similar arrangement was found in B 219, where a cord was twisted six times round the waist, supporting the costume, which was represented by a few fragments of leather tucked in under the belt.

Plate X, 1. Various examples of leather-work. No. B 219, from a circular grave, has white beads (type 1) sewn into the seams, as was the case in no. B 231, a long grave. A strip of leather has been inserted in the centre of the seam between the beads so as to keep the two rows apart. This garment was further ornamented on the surface with a fringe, as also was that of B 231. Hence, no doubt, the other fringed piece on the right-hand side of the photograph also originally belonged to it, though it was broken up and scattered in the plundered grave. The fringes are stitched in and thickly cover the surface of the leather. It may be that the linen garments covered with loose hanging threads, which are sometimes worn in the New Kingdom, are a derivative of some such costume as this. The fringed leather costumes of the pan-graves seem to have belonged to women, since grave B 219 contained a *kohl*-pot, and was therefore probably that of a female, while the skeleton in B 231 was of this sex. One is thus reminded of the skirts of long leather fringes which the girls wear in Nubia and the Sudan at present, though to-day the fringes hang direct from the waist and are not set on a backing of leather. Unfortunately no evidence was forthcoming as to how the pan-grave fringed leather was used, whether as a skirt or a cloak.

Nos. B 225, 239, from two circular graves. Scraps of plaited or woven leather, presumably used as cords. No. B 239 had been manufactured flat and since rolled up longitudinally; this is clearly shown in Plate VII, 2.

No. B 214, from a circular grave. A piece of the ordinary stout leather cordage as found in B 177, 182A, 183, 214, 216, 219, 223, 224, 235, 239. Other examples will be found on Plates VII, 2, IX, 2, XI, 2. It is a plain twist, and should be compared with the narrower quality from B 218 figured alongside, and with the very fine quality found occasionally, as in B 235 (Pl. XI, 2), B 238, where it was used for the three anklets, and B 201, where two such fine cords fastened the wrist-guard or bracer. The piece under discussion also shows one of the knots used. For another, see the top of the bundle of cords alongside.

No. B 218, from a circular grave. A bundle of leather cords bound together in various places. It no doubt formed a belt, and is not unlike belts sometimes used to-day.

Plate X, 2. B 184, from a long grave. B 213, from an oval grave. See Pl. IV, 2, p. 11. Pierced leather-work of the same quality of stout leather as the skirt, Pl. IX, 2, and the leather, Pl. X, 1. B 184 was actually found on

[1] See Pl. XI, 1.

[2] See Plates II, 2, IV, 1, VII, 4.

the thigh, while in B 213, which was badly wrecked, it was found near the pelvis. They are thus the remains of leather kilts, and were worn by men. Scraps of similar leather came from B 225, a circular grave. Pierced leather came from male graves of the C-group in Nubia.[1] The fashion of wearing pierced leather kilts may have given rise to the protective kilts of slit leather so often worn over the ordinary linen kilt by peasants in the New Kingdom.[2] The ornamentation of our specimens by means of small slits is very carefully and accurately done. In B 213, the best preserved specimen, it consists, in the middle piece, of a margin of ten continuous rows of slits succeeded by a similar space filled with eight intermittent rows of slits in groups of three with an occasional fourth. In the right-hand piece, also from B 213, there are thirteen continuous rows and eight intermittent. In this latter piece the spaces allotted to the continuous and intermittent rows are about the same, but are wider than the corresponding ones in the middle piece. A similar design, though different in details, is exhibited in B 184. Here on one side a wide space is occupied by at least seventeen continuous rows, while a comparatively narrow space is filled not with groups of slits, but with widely separated single ones. B 225 produced a few scraps of a similar design, in which the slits were grouped in pairs.

Plate XI. 1 shows the fine quality chamois leather and the stitchery. The whole group comes from B 179, and has been treated earlier in this chapter. Specimens of the prepared skins are also shown with the lining (?) of soft leather. At the top are two specimens of skins with the hair still on, to which other pieces of leather have been stitched. Down the left-hand side are still more pieces of soft hairless leather showing the stitchery.

Plate XI. 2. B 235. A great bundle of leather, still rolled up and complete. The beads which were sewn into the seams are quite clear in the photograph. They were nearly all the little brilliant blue-glaze beads, type 3, but there were also a few white shell disc beads, type 1. The leather cords wherewith the bundle was tied up are to be seen at the left-hand end. On handling the bundle a few more shells of type 2 fell out of it. With it was found the stamped hide bracer (wrist-guard) of Pl. XII, 3.

Bundles of leather were also found in B 181, 212, 234. In B 181 the small bundle or pad of leather was found under the head, no doubt as a pillow.[3] In B 212, 234, the bundles were quite small, being little more than pads.

[1] *A.S.N.*, 1908–09, p. 60, no. 12, &c. See also p. 12.

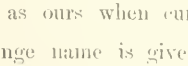
[2] Newberry, *The Life of Rekhmara*, Pl. xiii, lowest register. Note the kilts worn by the men on the top register of Pl. xxi, which have every appearance of being different from the previous examples, and of being simply leather pierced ornamentally as were our kilts. For larger copies of both of these, see Prisse, *Histoire de l'Art égyptien*, ii, Pls. 58, 59.

[3] Cf. *A.S.N.*, 1907–08, p. 164, nos. 81, 85, 86, &c.; *A.S.N.*, 1909–10, p. 110, no. 68; p. 139, no. 451, where the pillows are stuffed with chopped straw.

CHAPTER V.

VARIOUS TYPES OF OBJECTS.

Plates XII and XIII.

Plate XII, 1. 2, and 3 (B 201, 226, 235). See also Pl. III. 2, no. 12. and Pl. VI, 1. There can be little doubt that these objects are the archers' wrist-guards, or bracers, used to save the skin of the left forearm from the chafing of the released bow-string. For, in the first place, the two decorated specimens include bows prominently among their patterns, and it should be noted that the groups of bows on B 201 are not nine in number, and so are merely ornamental and do not represent the traditional enemies of Egypt. In the second place, they were not found in pairs, but singly, as one would expect of bracers. The only possible exception is no. 2. However, this would seem to be a cover for the other rather than an actual guard, as it was found covering it and is made of thin leather, now very pliable, instead of the thick hide of the others; further, it has a small hole in the point as if for the purpose of tying on to something. Against this cover theory must be set the difference in patterns on the cover and the covered. Bracers not unlike these are occasionally represented on the monuments. The earliest we know is a curiously shaped yellow object, which is just the shape of a side-view of such a bracer as ours when curved to fit the arm.[1] A strange name is given,  *šw'bw* (swabu). It is probable that the single bracelet which the archer wears on the wrist of his bow-hand in a Middle Kingdom tomb at Meir represents such a guard.[2] Later we find a definite example of the date of Amenhotep II,[3] where two bracers occur among a great collection of arms in a fresco. Rameses II is often shown wearing one on the left or extended arm.[4]

As regards the decoration, it will be noticed that the scheme has a generic resemblance in the two examples, for a lotus fills each of the top corners, which is barred off from the rest of the field by a series of straight lines. Unfortunately the upper central pattern of no. 3 is quite invisible. Underneath comes a decoration of wavy lines, which is followed by a bow or bows. The long tail is filled up by line patterns. The decorations have been pressed into the surface by means of a fairly blunt tool, which makes a good broad line. The marks sometimes ended in a spot, as in the ends of the lines of the lotus in the left-hand corner of no. 1. The area is outlined by two lines running round the edge, as was done in the case of the sandals. The bow figures conspicuously in the decoration. The representations are in the usual Egyptian fashion, showing a recurved weapon, a shape proper to the composite bow, which type,

[1] Lacau, *Sarcophages*, i, Pl. xli, fig. 225, and p. 179.

[2] Blackman, *Rock Tombs of Meir*, i, Pl. vi.

[3] Lepsius, *Denkmäler*, iii, 64 a.

[4] Champollion, *Monuments*, xiii = Rosellini, *Monumenti Storici*, lxxxi; Budge, *The Egyptian Sudan*, ii, plate accompanying p. 324, though the bracer is lacking, as are many other minor details in the copies of this scene in C., *M.*, lxxi = R., *M.S.*, lxxiv. Cf. also C., *M.*, xi = R., *M.S.*, lxxix; C., *M.*, xvii = R., *M.S.*, lxxxiii; L., *D.*, iii, 176 d = C., *M.*, lxxiii = R., *M.S.*, lxiv.

however, does not appear in Egypt until the XVIIIth Dynasty. It is a strange fact that the regular Egyptian bow, from pre-dynastic days onwards, was a simple one of plain wood, though it usually had the double curve of the composite bows.[1] Specimens can be seen in many museums, for instance in the Ashmolean, Case I, 53. It is still used to-day in Somaliland.[2] Another but rarer type was known with a single but often unsymmetrical curve.[3] Bows with a single symmetrical curve are carried in the XIIth Dynasty.[4] In the large representation on our wrist-guard, as in others, the curve is slightly exaggerated.

The central panel of no. 1 is filled with a strange device like scales. It can hardly represent the common feather pattern, as this is always turned the other way. In the triangular tail space we have a water pattern in the one case, and a diaper in the other. The two rows of blocked-out triangles edging out a space are well known in the ornamental leather work of the XVIIIth Dynasty. The bracers were fastened over the arm by a pair of fine leather cords in the case of nos. B 201, 235, and a pair of fine leather straps in the case of B 226, the remains being still visible in Pl. VI, 1.

Plate XII, 4. See also Pls. II, 1; IV, 1; VII, 2. Type of rounded potsherd, from round graves B 110, 212, 229, and long grave B 208. The edges were smoothed off all round, and the sherds would thus appear to have been used as scrapers or diggers. There is a curious uniformity about the shape, three of the four being oval, while the fourth was more circular. They were all of about the same size also, the length of the oval ones ranging from 64 to 83 mm., while the diameter of the round one was 70 mm. They were not confined to any particular sort of pottery, and are evidently made of pan-grave ware, as in B 110 a sherd of B-ware had been used.

Plate XII, 5. See also p. 14. Type of horn bracelet found three times, i.e. in the deposit in the irregular shallow hole B 182, in the long grave B 201, and in the circular grave B 202, in which nothing else was found. These bracelets are formed simply of a horn bent round until the butt meets the tip, and so vary considerably in the shape of the section. In B 182 and 201 the section is comparatively flat, while in B 202 it approximates to the circular. It is very different from, and much cruder than, the bracelet figuring on this Plate as no. 10, which is flat, broad, cut out of tortoise-shell, and quite thin.

Plate XII, 6. A strange horn object from long grave B 201. See Pl. III, 2. It is very thin and has a concavo-convex section. In this it is similar to nos. 7, 8 of this Plate, but, unlike them, it is straight and not curved. Unfortunately it is damaged at the end, so that we cannot say whether it had been set in a handle or not. Perhaps it may be a strigil in spite of its lack of the usual curve.

Plate XII, 7. A horn object from the deposit in the shallow irregular hole B 182. See Pl. VII, 3, and p. 14. Though in being curved and of a concavo-convex section it resembles no. 8, yet it is dissimilar in that it is much larger and heavier, is ornamented, and has been pierced with two large holes. We can only imagine it to have been a larger and more elaborate specimen of the general type no. 8, and suggest the strigil or body-scraper as the only parallel which occurs to us.

Plate XII, 8. Type of curved horn implement found in the long grave B 201, the round grave B 239, and in the pan-grave group

[1] Garstang, *Burial Customs of Ancient Egypt*, fig. 160, p. 159.

[2] Paulitschke, *Ethnographie Nordost-Afrikas*, Pl. xix, fig. 61. A specimen is exhibited in the Pitt Rivers Museum at Oxford.

[3] As for instance Lacau, *Sarcophages*, i, Pl. xli, nos. 230 to 234, where both shapes and a number of varieties of the recurved bows are shown.

[4] N., *B H.*, i, Pl. xlvii, &c.

B 227. See also Pls. III, 2, VI, 2, VII, 2, and pp. 10, 13. For shape this should be compared with the penannular objects of tortoise-shell of C-group date,[1] though the section of these, so far as can be seen, is quite different from that of our objects. Our specimens were all exactly alike, and no explanation of their use is forthcoming. We have offered the suggestion that they were strigils or body-scrapers, and have compared them (p. 13) to the curved skewer of hard wood or ibex-horn that the desert Hamite of to-day wears in his hair.

Plate XII, 9. A piece of horn of rounded section from the oval grave B 213. See also p. 12. It was found with the net bag of elephant's hair and the pierced leather (Pl. IV, 2). It cannot well have been a bracelet, unless it has sprung out of shape, for at present its curvature is too slight. Though in curve it resembles no. 8, yet in section it is quite different.

Plate XII, 10. Tortoise-shell bracelet from long grave B 201. See Pl. III, 2, and p. 10.

Plate XIII, 1, 2. Types of copper axes from long graves B 201, 230, and circular grave B 226. See also Pls. III, 2, VI, 1, and pp. 10, 12. It is to be observed that both examples of type 1 were found in long graves, while type 2 came from a circular grave. Type 1 is very much lighter than type 2, as will be seen by a comparison of their respective side-views. Both these types afterwards became usual in the New Kingdom; but while no. 2 is known in the XIIth Dynasty,[2] no. 1 is not. Type 1 would seem to be of Intermediate Period and XVIIIth Dynasty date,[3] and does not appear to run back into the XIIth Dynasty.[4] Hence its appearance in history would seem to be somewhat later than that of type 2, from the XIIth Dynasty form of which Mace would derive it.[4] Our specimen from B 230 compares most accurately with nos. 21, 22 of Pl. xxxii in *Diospolis Parva*, one of which belongs to the dagger of King Suazenrē, of the XIVth Dynasty. In the specimen from B 230 the base is not perfectly straight, but slightly concave, as in the two specimens from *Diospolis Parva*. This seems to be an early feature, as those of the XVIIIth Dynasty are straight. The bases of the latter are also often set at an angle to the axis of the blade,[5] whereas those of the earlier specimens seem always to be at right-angles, as in ours. The specimen from B 201, which retained part of its handle, showed no signs of having been lashed on as type 2 often is.[6] It was perhaps fixed by means of collars, as was sometimes done with this type.[7] Lashing, however, was used for this type also, as in the case of the Ahmose axe.[8] Type 1 differs considerably from no. 2; for while no. 1 always remains light and thin-waisted, no. 2, starting as a heavy axe, tends to become heavier, more solid, and less elegant. Again, the wings of no. 1 always remain rudimentary and do not tend to free themselves from the natural curve of the sides, whereas the wings of no. 2 are always well accentuated, becoming later very much exaggerated. This, however, gives a solid base for the attachment of a heavy axe to the handle. Moreover, while the sides of type 1 are strongly incurved, those of type 2 are at the utmost only slightly so, and tend to become straight; the cutting edge of no. 2 is proportionately much wider than that of no. 1, and at the same time less rounded. All these

[1] *A.S.N.*, 1908–09, Pl. 37 c, 9.

[2] P., *D.P.*, Pl. xxxii, 3; P., *K.G.H.*, Pl. xvii, 6, 9.

[3] P., *D.P.*, Pl. xxxii, notably no. 22; P., *G.R.*, Pl. xii, stated to be early XVIIIth Dynasty on p. 14; Bissing, *Thebanischer Grabfund*, Pl. 1, the axe of Ahmose.

[4] Cf. P., *D.P.*, pp. 51, 52.

[5] Cf. Bissing, *Thebanischer Grabfund*, Pl. xii, nos. 8, 9; *Archaeologia*, 53, Part i, Pl. iii, fig. 2.

[6] See Pl. VI, 1; Quibell, *Ramesseum*, Pl. ii, 7.

[7] P., *D.P.*, Pl. xxxii, 21.

[8] Bissing, *Thebanischer Grabfund*, Pl. i; cf. Pl. xi; *Archaeologia*, 53, Pl. iii, no. 2, &c.

features of no. 2 are seen in its early forms in the XIIth Dynasty. At present there seems to be a long gap in its history, for with the exception of our specimens it does not occur again till the later New Kingdom, when it becomes common.[1]

Plate XIII, 3. No. B 201/7, from a long grave. See also Pl. III, 2, and p. 10.

Plate XIII, 4. No. B 205 from a long grave, and B 226 from a circular grave. See also Pl. VI, 1, and p. 12. The pair of tweezers from B 226 was ornamented with two cuts, while that from B 205 was plain.

Plate XIII, 5–9. See p. 19 and Pl. VIII, 1, no. 16, for nos. 7, 8, 9.

Plate XIII, 10. Type of white shell earring. See Pl. VII, 1, and p. 13.

Plate XIII, 11. A melon bead. Nos. B 153, 201/10, from long graves; B 236, from a pan-grave group. See Pl. VIII, 1, nos. 12, 16; cf. III, 2, no. 10.

Plate XIII, 12, 13, 14. See also Pls. II, 2, III, 2, VI, 1, and pp. 9, 10, 12. Nos. B 201, 207, 208 came from long graves; B 232 came from a unique oval (?) grave with a step, which is perhaps only an unfinished long grave: B 219, 226 came from circular graves. It is noticeable that out of the six *kohl*-pots discovered half came from long graves, and possibly B 232 should be included in this category, as it was more rectangular than oval in shape. Only two were found in the more numerous circular graves. Two came from graves nos. B 201, 226, which included weapons, axes and bracers, and were therefore those of men. The blackening of the eyelids by men is still customary in Egypt, especially at festivals, and has been adopted as a Mohammedan ordinance. Two of the *kohl*-pots from graves B 208/10, 232 were of blue marble, a substance which, while common in the Middle Kingdom, was not unknown in the early XVIIIth Dynasty.[2] Both of these *kohl*-pots belong to the one type here figured as 13, and neither of them comes from a circular grave. The others are of alabaster, B 219 being of the fine soft-coloured rather translucent alabaster. It was also the only one which retained its original cover. No. 226 had the top broken off. Nos. B 208, 232 were chipped and had no covers. Covers had been supplied to two of them, nos. B 201 and 207. That supplied to B 201 had been moulded in clay and fired, whereas a flat potsherd had been rubbed down to fit B 207. The supplying of odd covers to *kohl*-pots was not entirely limited to the pan-grave people, for an instance was found in the typically XVIIIth Dynasty group B 154, where a little alabaster *kohl*-pot had been provided with a cover of a beautiful brilliant blue glaze. Type no. 12 is unusual. It may be compared in shape to the curious great pot of Sennsert II.[3] Attention should be drawn to the neck of type 14, which seems to be the result of cutting in too deeply above the shoulder. A strong hollowing of the under side of the rim very often accompanies this deeply cut neck, and suggests that there may be connection between the two, and that the one is a by-product of the other, accidentally produced in the working. It is quite unlike any of the other types of necks, and in the New Kingdom cemetery it seemed to occur haphazard among any of the types of *kohl*-pots. It certainly did not belong to any special shape, and a study of a large collection of *kohl*-pots may show this feature not to be a mere variable detail of the types, but to be a fundamental criterion on which a division of *kohl*-pot types into two groups can be based.

[1] P., *L.G.M.*, Pl. xxii, 12, p. 28; P., *K.G.H.*, Pl. xvii, 27, 28; Quibell, *Ramesseum*, Pl. ii, 7, p. 13; Petrie, *Denderch*, Pl. xxiv, 16, 17; MacIver, *El Amrah and Abydos*, Pl. xlv, D 1.

[2] At Sawamah last year we found a specimen. Cf. Garstang, *El Arabah*, p. 29, where three cases are quoted: Currelly, *Abydos*, iii, Pl. lix, 5, 6.

[3] P., *K.G.H.*, Pl. xiv, 16.

Plate XIII, 15, 20. See also Pls. II, 2, VI, 1, and pp. 9, 12. Specimens of small smooth stones or pebbles, of which quite a number, of varying sizes, were found, some, like the agate and four black pebbles in B 213, being quite small. None were large. They came from graves B 208, 213, 223, 226.

Plate XIII, 16, 17, 18, 19. See also Pls. II, 1, VI, 1, VII, 2, and pp. 8, 12, 13. Several palettes were found with paint or signs of rubbing on them. In B 110 there were two (nos. 16, 17 in this Plate), with one rubber nearly as large as themselves. These two palettes consisted of flat natural pebbles of black granite, while their rubber was a rounded pink pebble. From this grave also came the notched pebble no. 19, which had a few longitudinal scratches, and so might have been a palette, though it showed no clear signs of such use. The decoration of notches at the end should be compared with that of the C-group ivory pendant.[1] There are thus two, and perhaps three, small palettes from this one grave. In B 243 there was a palette consisting of a broken piece of yellow sandstone. It was quite flat and had a few stains of green paint still left on it. Judged by this, the flat piece of sandstone in B 225 was probably a palette also. At least one of the flat stones in B 226 was a palette (no. 18 in this Plate), as was probably the oval flat pebble of B 239. (See Pl. VII, 2.) The flint flakes which were found in B 212 were the only representatives of their class found. (See Pl. IV, 1, and p. 11.)

[1] *A.S.N.*, 1907–08, Pl. 66, b, 32.

CHAPTER VI.

THE POTTERY.

Plates V and XIV.

The pan-grave pottery forms a very distinctive class, and so far as Egypt is concerned it is quite apart from anything else. Each of the pan-grave sites has produced at least a few examples of the stock types, except that at Balabish we did not find any of the black punctured ware, and at Rifeh comparatively little of the Buff ware seems to have been used. The general similarity of the *corpora* of pan-grave pottery is apparent on a comparison of our Pls. V and XIV with *Diospolis Parva*, Pls. xxxix, xl, and *Gizeh and Rifeh*, Pls. xxv, xxvi. It will be observed that the native-made classes P, B, and H are all bowls. We did not find any of the beautiful black-topped cups with flared rims and a grey band, for the reason to be explained on p. 43. The types are all drawn on Pl. XIV, and examples are photographed on Pl. V, to show the quality, surface, and so on.

1. *Red Polished Ware, P*; cf. Pl. V, nos. 242, 182A. This is a rare fabric, of which we found only the three specimens figured. It is a very fine quality pottery, with a brilliant red-polished surface. The walls are very thin, as hard as stone, and show a black core on a fracture with a little sand in the clay, but never any chopped straw (*tibn*). The photographs of nos. B 242, 182A, on Pl. V, 1, show the quality of the material. The shape of P 3 is rare and is not easy to match. Among Egyptian pottery we can compare it in shape with two vases alone, one from Abydos,[1] of Late Intermediate, and therefore contemporary, date, and the other from Saqqara,[2] of XIIth Dynasty date, but with a slightly more conspicuous rim. In Nubia, however, we have close parallels from among the black-topped ware of the early predynastic[3] and that of the early dynastic[4] period. It does not match any of the Egyptian predynastic or proto-dynastic shapes. A very similar vessel, but with the addition of a slight rim like that of the XIIth Dynasty bowl, comes from Santa Verna, in Gozo.[5] This bowl belongs to class 2 of the Maltese pottery, which includes a red-and-black ware, sometimes exhibiting the one colour inside and the other outside.

2. *Black-Topped Ware, B*; cf. Pl. V, nos. 220, 181, 68. This was by far the most common class of pottery. It was made of exactly the same clay as the P ware, and was equally thin, except in the case of type 2, where the walls were materially thicker. However, the shapes of the two classes are quite different. In this respect class B is nearer to class H, for the straight-sided deep cup was found in both the B and H classes, as was the moulding of type B 3. The collar of types B 4, 5, 6 was not found outside the B class. The black colour was almost invariably very accurately confined

[1] P., *C.A.*, ii, Pl. xxxi.

[2] Quibell, *Excavations at Saqqara*, 1906-07, Pl. xxxix, 1.

[3] *J.S.N.*, 1907-08, Pl. 60, a, 13.

[4] *J.S.N.*, 1907-08, Pl. 61, a, 22; *J.S.N.*, 1908-09 Pl. 11, a, no. 1.

[5] R. N. Bradley, *Malta and the Mediterranean Race*, fig. 31 (opposite p. 112), the smaller of the two here figured.

to the rim, and never descended far over the surface of the pot. When it is not otherwise indicated by a wavy line it coincides with the rim. We suspect that the taste for painting a black rim on red pottery, which came in in the XVIIIth Dynasty, is a reminiscence of these pan-grave pots. In the pan-grave pottery the black is of a brilliant metallic lustre, and the interior of the pots is black. The polishing of the specimen from B 181 was exceptionally fine, the colour being a handsome rich plum-red. Though the polish on some of the others was more brilliant, it was not so even as on this. This can be seen by a comparison of the photographs on Pl. V. The colour as a rule was a good red. It should be observed that the apparent grey ring on B 181 in the photograph is not an integral part of the pot, but is only due to an incrustation of salt.

Type 8 probably does not belong to this class at all, as it was of a thick coarse manufacture and black all over. Its clay had some sand in it, but, like the others, did not contain chopped straw. As we only once found fragments of such a vessel we have tentatively included it here, in preference to making a separate class for it alone.

The deep straight-sided bowls are common in the pan-graves, and are found in other burials of the Intermediate Period,[1] but in this last case the ware is entirely different, being of a soft ochre material. The moulding at the rim seems to be peculiar to the pan-grave pottery, and is not very common even in that of the Nubian C-group.[2] The collar of nos. 4, 5, 6 resembles that on pottery of the early ages, late predynastic or proto-dynastic times. It seems just to last into the Old Kingdom, when it dies out.[3] The rare shape of no. 6, with the uncurved sides expanding towards the bottom, should be observed. Something similar occurs in H 3.

3. *Hatched Ware, H*; cf. Pl. V, nos. 240, 180, 208/3, 177. This is a thin stone-hard pottery, made of the same clay as the B and P classes. B 208/3 was the only one which showed any traces of chopped straw, and, as will be seen from the photograph, its quantity is practically negligible. The clay of this pot was somewhat browner in colour than that of the others. In every case the bowl had been painted red, but only once was there any attempt at polishing. This was on the bowl here representing type 4, and the polish was of the slightest. In this uniform dull red painted surface our hatched pottery is in marked contrast to the late C-group incised ware of similar quality, which seems to be polished, whether black, brown, or red.[4] Pottery with incised decorations, without a white filling, occurs occasionally in the pre-dynastic age,[5] and in the Middle Kingdom a taste for ornamenting pottery with incisions arose. Though the decorations are sometimes similar to those exhibited on our pots,[6] they are essentially different in arrangement, for they are usually on the interior of dishes. Those that are on the outside of vases are generally wavy lines or "scrabble" patterns.[7] Moreover, both the clay and the vases themselves are completely different from those of the pan-grave pottery. Thus the hatched pan-grave pottery forms a class to itself, and it is found regularly wherever pan-graves are unearthed.

[1] P., *C.A.*, ii, Pl. xxix, C 63, pp. 60, 64.

[2] For references, see p. 47.

[3] For references, see p. 47.

[4] *A.S.N. Bull.*, no. 6, pp. 3, 5, class xi; cf. *A.S.N.*, 1909–10, p. 19. The other classes of C-group incised ware are not comparable to our bowls, as in class xii the clay is quite different, being soft, and in class iv not only is the clay of another quality, but the vessels themselves and ornaments differ completely.

[5] P., *N.B.*, Pl. xxxv, 74, 76.

[6] Cf. P., *K.G.H.*, Pl. xiii, nos. 106, 108, and our H 2.

[7] For instance, P., *K.G.H.*, Pl. xiii, 39 ff.; *G.R.*, Pl. xiii D, 170, 181, xxv, 11, 12, but on this plate cf. the rare bowl 41.

The hatching was produced by a blunt point or group of points on the surface after it had dried, but before firing. The incisions seem to have been made singly, though the pit markings on the moulding of B 240 (see Pl. V) seem to be too regular to have been produced in any way but by the use of a comb. The rows of pit markings vary somewhat in the number of marks included, those on B 240 ranging from seven to nine, while those on the bowl figuring as type 4 range from five to six. The favourite pattern at Balabish consists of opposing to each other sets of arcs of concentric circles (types 2, 4, 5), and the same idea is carried out in straight lines and amplified in type 3.

4. *Buff Ware.* Cf. Pl. V, no. 212. A very unmistakable class of pottery, very well made of a thick, hard, close, fine clay, and well turned. The colour varied somewhat from a pinkish yellow to almost a pink, but the yellowish tinge preponderated. It was liable to go green, especially if it had contained scented ointment. The beautifully smooth silky surface which one connects with the best quality cylinder jars of the 1st Dynasty[1] was observed on some of the pots, especially on nos. B 201/3, 4, and 233, which contained ointment. Probably therefore this effect is partly produced by the oily nature of the ointment, and is not merely due to the clay itself, especially as it was found on the two pots from B 201, which were different from the others in being red-polished. The clay is close and entirely without chopped straw, but contains a good deal of sand, and is thus not unlike that of the W or D classes of pre-dynastic pottery, and some of the proto-dynastic ware, but the colour is much yellower. It is a variety of the pottery which Reisner calls class C.[2] The massive rims of these thick, strong pre-dynastic classes occur in the pan-grave pottery again,[3] and serve to heighten the resemblance already noticeable in the clay. A clay not unlike it is found again in the Middle Kingdom. In the XVIIIth Dynasty it is specially used for a class of pottery often decorated with painted lines in what is usually thought of as a Syrian style. The form of such decorated pots[4] is evidently allied to our type 8. The clay is also specially used for some of the rare shapes of handled *amphorae*,[5] though here the body is generally thinner in proportion.

This class of pottery was generally neither painted nor polished, though the pots representing types 1, 2, 6 had been red-polished. It is Egyptian in its clay, in the actual shape of some of its pots, and in the general type of others, but the combination of this clay and the group of shapes here exhibited seems to be peculiar to the pan-graves; for it is remarkable that though in detail these pots can only be matched here and there in the period stretching from the Old to the New Kingdom, yet in two of the pan-grave sites the greater part of this series has now been found. It is possible closely to match our types 1, 2, 4, 7, 8, 9 in nos. 74, 48, 69, 58, 62, 47, and 63 at Hu,[6] and from the appearance of many of the pieces in the photographs and a study of those examples now in the Ashmolean Museum, it would seem that the Hu pottery is of the same hard, close, thick quality as ours. The uniformity which is discoverable between the shapes and clays of the two finds of this pan-grave pottery seems to establish it as a distinct class to itself, and to separate it from the other Egyptian pottery found in the pan-graves. This highly homogeneous group forms a great contrast with the variety of shapes and clays noticeable in the heterogeneous collection of Egyptian pots grouped

[1] P., *N.B.*, Pl. xxxii, 71 a, 80.

[2] *N.D.*, ii, p. 90.

[3] P., *N.B.*, Pl. xxxi, 11/33; xxxiv, 47, 51; and our types 4, 7, 8, 9.

[4] Petrie, *Abydos*, iii, Pl. lx, 127.

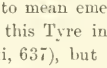
[5] Such as Petrie, *Abydos*, iii, Pl. lx, 129; P., *L.A.M.*, Pl. xvii, 19.

[6] P., *D.P.*, Pls. xxxix, xl.

below it in the Plate. In view of the general homogeneity of this class and the resemblances of its clay and rims to those of some classes of pre- and proto-dynastic pottery, it seems as if some extraneous influence were at work giving new life to an old industry which had languished. It is hardly likely that the arrival of the pan-grave people themselves should have given this fresh impetus, as in their homeland of Nubia this ware is only known as an import, and moreover this kind of pottery is in use in Egypt before the pan-grave period, as it dates back to the XIIth Dynasty. There is, however, another force which may well be accountable for the revival of the old art. This is the influence of Asia. Egypt was in close connection with Asia during the middle pre-dynastic period, when the use of this clay was first introduced with the wavy-handled and decorated classes of pottery. This is evidenced by the use of such materials as lapis-lazuli,[1] silver,[2] emery,[3] obsidian,[4] &c. In the proto-dynastic age Asiatic influence is once more noticeable, and this is the time of the cylinder jars, the clay of which, with its silky drab surface, closely resembles that of our class of ware, and is in fact more exactly similar than any other class of Egyptian pottery. In the proto-dynastic age obsidian[5] is not uncommon as a material for vases, lapis-lazuli[6] is used again, art shows striking resemblances to that of Babylonia, a rare 1st Dynasty type of copper adze is found again in Cyprus,[7] and foreign pottery of a Syrian(?) character is found in

[1] P., *D.P.*, Pl. iv, p. 27. A large piece of lapis-lazuli of middle pre-dynastic age is recorded in P., *N.B.*, p. 28. Another, S.D. 56–64, *El Amrah and Abydos*, p. 21. In the XVIIIth Dynasty lapis-lazuli was obtained from N. Syria in general, and also from Assyria (B., *A.R.*, ii, § 446; Winckler, *Tell el Amarna Letters*, no. 15), Singara, in N. Mesopotamia (B., *A.R.*, ii, 484), Mitanni and Babylon (*Amarna Letters*, nos. 7, 9, 10, 17, 19, 21). A special quality is described as lapis-lazuli of Babylon (B., *A.R.*, ii, 446, 484). This all agrees with the supposition that its ultimate place of origin was Persia, which is still the main source of supply, and also is the least distant from Egypt.

[2] P., *D.P.*, Pl. iv, p. 27. A larger piece is to hand in the silver bowl of a spoon, S.D. 60–70, recorded in *El Amrah*, p. 24. For the sources, see p. 39, note 2. A silver dagger from Gebel el Tarif is probably of the middle pre-dynastic age also, for it was found in the same cemetery as painted pottery of class D (de Morgan, *Recherches sur les Origines de l'Égypte*, p. 35).

[3] For emery of the middle pre-dynastic period, see P., *N.B.*, Pl. lxiv, 99, p. 18. This piece was found with the bull's head amulet, Pl. lxi, 4, which is a middle pre-dynastic type. The emery blocks for polishing beads, p. 44, are presumably of this date also. The emery double vase, *Hierakonpolis*, ii, Pl. lxiv, 20, p. 50, is probably also of the middle pre-dynastic period, as the majority of the dateable double vases are of this age. Of this age again is reported an emery (?) rubbing pebble from Nubia (*A.S.N.*, 1907–08, p. 132, no. 43), and a piece of pre-dynastic date is recorded in *El Amrah and Abydos*, p. 49. On his seventeenth campaign to Kadesh, Tunip, and Naharain, i.e. the Aleppo district (B., *A.R.*, ii, § 534; Sethe, *Urk.*, iv, 731, l. 16), Tuthmosis III. obtained  *išmrỉ*, supposed, on account of its resemblance to the Greek σμύρις and to the Hebrew, to mean emery. A sample of emery comes from Tyrus (is this Tyre in Phoenicia? *Zeitschr. für Krystallographie*, xi, 637), but to-day it comes mainly from Naxos and Asia Minor (*Zeitschr. für Kr.*, xlii, p. 635, Smirgel), apparently from the neighbourhood of Smyrna and Ephesus. It is not clear whether all the places quoted are intended to be near Smyrna, as the first two, Baltizik (Baltchik?) and Aziziych, are well-known towns in East-Central Asia Minor. An inquiry from Prof. Schweinfurth proves that the emery, stated (Borchardt, *Grabdenkmal des Ne-user-re'*, p. 142) to have been found by him at Aswan, is not in blocks, but is contained in the sand to the extent of 15 per cent. Hence our *blocks* could not have originated from that place.

[4] P., *D.P.*, Pl. iv, p. 27, and again P., *L.G.M.*, p. 24. See further, p. 39, note 2.

[5] P., *R.T.*, ii, Pl. xlviii, 87, 106; de Morgan, *Origines de l'Égypte*, ii, p. 180, figs. 625–627, and there are two more vases in the Cairo Museum from the same find similar to 625.

[6] A large piece of lapis-lazuli is known in the statuette, *Hierakonpolis*, i, Pl. xviii, 3, p. 7, or with its head, Garstang, *Annales du Service*, viii, Pl. ii, figs. 2, 3. The lapis-lazuli beads of the third bracelet from the tomb of Zer are well known, P., *R.T.*, ii., Frontis., p. 18.

[7] Petrie, *Ancient Egypt*, 1915, pp. 12, 13, fig. 4; cf. *Tarkhan*, i, Pls. v, 26, vi, 7; *Tarkhan*, ii, Pl. iii, 7; Myres and Richter, *Catalogue of the Cyprus Museum*, Pl. iii, 501, p. 53.

Egypt.[1] Similarly in the XIIth Dynasty, when Drab ware is found again, Asiatic products once more appear in the obsidian[2] and silver[3] so very much in favour at that time and used in large pieces, and this wave of Asiatic influence comes to a head in the Hyksos supremacy, which was contemporary with the pan-grave civilization. Hence if the revival of this art should be due to external influence, we find the Asiatic ready to hand. It is probably no chance that in the New Kingdom, which was admittedly strongly influenced by Syria, this clay was in general use for pottery of a Syrianizing character,[3] or that a local clay of similar class and appearance was used commonly for the pottery of Northern Syria.[4]

Reference has already been made to the resemblance of the silky surface of some of the

[1] P., *R.T.*, ii, Pl. liv; *Abydos*, i, Pl. viii. In these plates the pottery is provisionally described as Aegean, but this was before the discoveries in Crete. *Tarkhan*, i, Pls. xvi, xix, 24, p. 17, § 30.

[2] For the original publication, DE MORGAN, *Fouilles à Dahchour*, 1894, 1894–5, should be consulted, but the information required here is conveniently grouped in MASPERO's *Guide to the Cairo Museum* (QUIBELL's translation), 1908, p. 426, A, various silver plaques; p. 427, B, silver settings to eyes from three mummy cases; p. 428, E, silver mirrors; three eye-settings in silver; p. 429, B, several silver mirrors (11 and 12 cm. in diameter and of thick metal); p. 431, F, a large diadem of silver. Besides these there are some very massive plates about 10 cm. long and various other large and massive objects not named in the Guide-book. Another group of silver jewellery of this age, including hawks and a bracelet, is figured in *El Amrah and Abydos*, Pl. xlv, and p. 88. A large number of silver vessels were dedicated to different gods by one of the Senusserts (DARESSY, *Ann. du Service*, iv, p. 102). Five vases of obsidian are named on p. 428, ii, of the Guide-book. Obsidian scarabs are said to be very characteristic of the XIIIth Dynasty (HALL, *Cat. of Egyptian Scarabs, &c., in the Brit. Mus.*, i, p. xxvi). Both the obsidian and the silver might be supposed to have come from the Aegean, as archaeologists chiefly think of obsidian as coming from Melos and other Greek islands where it is well known. Manufactured silver also is known at an early date from Crete (Mosso, *Palaces of Crete*, p. 271, fig. 132), from Amorgos (DÜMMLER, *Athen. Mitth.*, 1886, Beil. i, p. 1, 3, p. 20), while in classical times silver was mined at Siphnos (*Hdt.*, iii, 57), on the borders of Macedonia (*Hdt.*, v, 17), and there were the famous mines at Laurcion, near Athens (SMITH, *Dict. Greek and Roman Geography*, Laurium). But in view of the above-mentioned earlier occurrences in Egypt of these imports in clearly Asiatic connections, and in view of the strong connection that there is with Syria in the XIIth Dynasty (cf. the Sinuhe story, Senusert III's campaign in Retenu, *El Arabah*, p. 33), it seems quite unnecessary to go to the Aegean for the origin of these materials. For obsidian is largely used for neolithic implements in Russian Armenia (CHANTRE, *Recherches Anthropol. dans le Caucase*, i, fig. 2, Pl. i, figs. 1, 3, 5, 6, 7), and it was also used in prehistoric stations at Susa and in the neighbourhood of Mesopotamia (DE MORGAN, *Recherches sur les Origines de l'Égypte*, p. 175). Its abundance at the eastern end of Asia Minor and its neighbourhood makes unnecessary any idea of importation from so distant a place as the Aegean. Further, in ancient days silver was very definitely a product of Eastern Asia Minor and its neighbourhood. Tarshish (Tarsus) exported it (Jer. x. 9; Ezek. xxvii. 12). Keftiu (Cilicia and its neighbourhood) exported silver ingots and blocks to Egypt (Rekhmire fresco, see *J.H.S.A.*, vi, p. 54). Shalmaneser II names a mountain in Tabal, the Antitaurus and Amanus district, which contained silver (E. SCHRADER, *Keilinschr. Bibl.*, i, 143). The Hittites brought silver to Egypt (B., *A.R.*, ii, § 485; SETHE, *Urk.*, iv, p. 701, l. 12); the metal presents of the Hittite king Shubbiliuliuma consist entirely of silver (KNUDTZON, *Die el-Amarna Tafeln*, letter 41), and the seal of the Hittite treaty with Rameses II is also of silver (B., *A.R.*, iii, § 391; L., *D.*, iii, 146, l. 36). Tuthmosis III obtained large weights of silver from N. Syria on his fifth and seventh campaigns, and a silver statue from the Lebanon district, besides "silver in many rings" (B., *A.R.*, ii, 436, 459, 471; SETHE, *Urk.*, iv, p. 666, l. 9; p. 686, l. 6; p. 692, l. 1), while the following list of occurrences of silver objects or of objects ornamented with silver shows how general was its use throughout this country in the fifteenth cent. B.C. (B., *A.R.*, ii, §§ 431, 434, 435, 447, 462, 467, 482, 490, 491, 501, 509, 518, 533, 537). Hence it is not surprising that silver was called "northern," (SETHE, *Urk.*, iv, p. 634, nos. 8, 9). The Assyrian kings obtained great quantities of silver from the Amanus and N. Mesopotamian districts (E. SCHRADER, *Keil. Bibl.*, i, 67, 73, 79, 163, &c.). It is unnecessary to add the classical references also, but suffice it to say that silver mines are reported from E. Asia Minor to-day. This in conjunction with the other Asiatic connections above-named—lapis-lazuli, emery, art, similarity of adzes—leaves little doubt but that Egypt's earlier supply of obsidian and silver also came from Asia.

[3] See below, p. 67, note [2].

[4] Some of these N. Syrian vessels are published by WOOLLEY in *J.H.S.A.*, vi, Pls. xxii, xxiii.

ointment jars of the Buff ware to that of some of the proto-dynastic cylinder jars. Out of the six times that traces of ointment were discovered they attached themselves in B 182, 182A, 201, 233, 240 to vessels of this ware. In the other case, B 208, a strong scent of ointment permeated the whole pile of objects, which had contained several pots of this class. However, it did not attach itself to any single object more than to another.

The use of this class of clay for pottery destined to contain ointment is yet another link between the pan-grave people and those of the later pre- and proto-dynastic age.

Types 1 *to* 6. While these belong to the general class of pear-shaped vases which has representatives in almost all the earlier ages of Egyptian civilization from the pre-dynastic onwards, it is not easy to match some of the specimens exactly outside of the pan-grave period.

No. 1. We find no satisfactory connections outside of the pan-graves. It is red-polished.

No. 2 is not unlike a contemporary vase of the Intermediate Period,[1] but is still more like the pan-grave example X, 48.[2] It is red-polished.

No. 3 is not one of those which are found in the pan-grave pottery of *Diospolis Parva*, and perhaps has more resemblance to the Egyptian shapes than the others. It might be compared to such vases as *Dendereh*, Pl. xvii, 44 (VII–XIth Dyns.); *Qurneh*, Pl. xviii, 468 (XIth Dyn.); P., *D.P.*, Pl. xxxvi, 152 (XII–XVIIIth Dyns.); P., *G.R.*, Pl. xxvii, 3, 275 (Tuthmosis III); *Six Temples at Thebes*, Pl. vii, 1 (Tuthmosis IV).

No. 4 resembles the XIIth Dynasty shape of *El Kab*, Pl. xvii, 126, but more still the pot 83, P., *G.R.*, Pl. xxvi, which is of the XVIth Dynasty, and quite likely from a pan-grave.

No. 5. We have not found anything really corresponding to this pot, with its narrow neck and rather pointed base.

No. 6 is not represented in the *Diospolis Parva* pan-graves. It is not unlike many XVIIth or XVIIIth Dynasty shapes.[3] However, the brim is different in our specimens, in that it is turned out and is flanged inside in order to receive a cover, as is sometimes done in the pre-dynastic pottery.[4] This is not unknown in the XVIIIth Dynasty. Our vase was red-polished.

Type 7 occurs five times here, that is to say much more often than any other of the Buff ware shapes. It is figured twice from the *Diospolis Parva* pan-graves. The type is known from the end of the Old Kingdom onwards.[5] It is distinguished from many of the earlier types of this class by the lowness of the shoulders. See further, p. 14.

Type 8 is figured twice among the *Diospolis Parva* pan-grave material. We found only one example of it. It resembles a class which is well known in the XVIIIth Dynasty, though always rare, and which comes in as early as the Intermediate Period[6] in which the pan-graves fall. It is often decorated with lines in the so-called "Syrian" style.[7] The same kind of clay is also used for those XVIIIth Dynasty pots, and they are remarkable for their fine smooth surface.

Type 9. See further, p. 14. This shape is of a class well known in the New Kingdom. For comparison such examples may be quoted as

[1] MacIver and Mace, *El Amrah and Abydos*, Pl. liv, 42.

[2] P., *D.P.*, Pl. xxxix.

[3] Petrie and others, *Meydum and Memphis III*, Pl. xxvii, 101; Petrie, *Ehnasya*, Pl. xxxix, top row.

[4] P., *D.P.*, Pls. xiv, 67; xix, 59, *a*, *b*.

[5] Petrie, *Dendereh*, Pl. xvii, 59 (VII–XIth Dynasties); the Earl of Carnarvon, *Explorations at Thebes*, Pl. xlvii, no. 1 (Intermediate Period).

[6] P., *C.A.*, ii, Pl. xxxiii, B 15, p. 69. Attention must be called in passing to the isolated specimen, *Abydos*, ii, Pl. xliv, 97, dated to the IInd–Vth Dynasties. It has no doubt got out of its horizon.

[7] See the previous reference; also Petrie, *Abydos*, iii, Pl. lx, 127, and often.

El Arabah. Pl. xx, E 268 or P., *G.R.*, Pl. xxvii, G 189.

5. *Borrowed Pottery*. This consists of quite a heterogeneous collection of shapes and clays.

Type 1 was burnished red in a poor streaky manner. The lines of burnishing did not run down to the centre of the bowl, but across in such a way as to divide the circle into four segments.

Type 2 is an ordinary pre-dynastic pot of type D 5b.[1] The clay has fired to an unusually green colour, and the decoration of wavy lines has been put on with the usual red paint. As mentioned on p. 9, isolated pre-dynastic pots have several times been found in the graves of the related C-group people of Nubia. There was evidently a taste for the products of this age.

Type 3. An ordinary tubular pot of the XVIIIth Dynasty both in shape and clay. Although very typical of the New Kingdom these shapes are known in the Intermediate Period.[2] Both examples of type 3 were of the ordinary unpainted porous brown ware and had red-painted rims.

Type 4 is of ordinary brown clay and is blackened inside.

Types 5, 6, 7 are saucers rubbed down smaller.

Type 8 is red-polished. It is of the same type as the much larger XVIIth Dynasty bowl, P., *K.G.H.*, Pl. xiii, 40.

Type 9 is a small pot of hard close brown ware.

Type 10 is of red clay, painted red.

[1] P., *N.B.*, Pl. xxxiii, 5, b.

[2] P., *G.R.*, Pls. xxv, xxvi; P., *C.A.*, ii, Pl. xxix, c, 63.

CHAPTER VII.

COMPARATIVE SURVEY OF THE PAN-GRAVE CIVILIZATION.

From the material found in the three published pan-grave cemeteries, those of Hu, Rifeh and Balabish, it is evident that the civilization exhibited by them is one. Naturally, there are differences between the three, as for instance the presence of large black incised bowls at Hu and the absence of such bowls from Rifeh and Balabish, the presence of axes and wrist-guards (bracers) at Balabish and their absence from Hu and Rifeh, and so on. Yet these are only minor differences, such as would be bound to occur between separate sites, each of which produced comparatively few graves. Perhaps more serious, however, is the absence of burials of dogs and beetles from both Rifeh and Balabish.[1] These few differences, however, only tend to throw into relief the homogeneity of the whole. Petrie has already given a description of the pan-grave civilization itself, which is to some extent supplemented by our finds.

We did not find any of the beautiful flared cups of thin red polished ware with black tops and a grey band separating the black from the red.[2] Not unnaturally, at the time of their first discovery in Egypt they were included among the objects from the newly discovered pan-graves. This was the more natural, as bowls of hatched ware not dissimilar from those from the neighbouring pan-graves were found with them. When found in Nubia these black-topped cups and bowls were also classed by Dr. Reisner as C-group.[3] However, in the light of further discoveries it is now found that, while the patterns of the hatched ware from the true pan-graves repeat themselves with little variation, nothing has yet been found quite like these hatched patterns of *Diospolis Parva*, Pl. xxxviii. A sufficient quantity of this hitherto rare and very unmistakable black-topped pottery has now been published to enable some opinion to be formed about it.

In the first place, the grave at Hu which contained these cups did not form part of the pan-grave Cemetery X, but was situated a long way from it in another cemetery, E.[4] Therefore it is hardly surprising that its contents do not exhibit pan-grave features. A comparison of Pl. xxxviii, which illustrates this grave, with Pls. xxxix, xl. in P., *D.P.*, will emphasize the divergence between them. Besides the hatched bowls already mentioned, there were found in this grave a pair of ivory objects now known to be protectors for rams' horns, and a knife.[5] Such things are not found in the true pan-graves, but are found again at Kerma in

[1] To these more serious differences must be added the difference in the form of the graves, which at Hu were shallow pans, whereas at Rifeh and Balabish they were pits about 1·50 m. deep. The shallowness of the Hu graves may perhaps be due to denudation.

[2] See P., *D.P.*, Pl. xxxviii, top right-hand corner, or MacIver and Woolley, *Buhen*, Pl. 52.

[3] *A.S.N. Bulletin*, no. 7, p. 3.

[4] P., *D.P.*, p. 45 and Pl. i.

[5] There was also found a curious little nail-shaped object of white material (with the knife and horn-protectors on Pl. xxxviii), which in the light of our specimen we suggest may have been a lip-stud. Thus, to get actual cultural connection between this grave E 2 and the pan-graves, we have to turn to this very rare object. Hitherto no such object has been reported from the other graves which furnish the pottery, nor is any named in the summary account of the work at Kerma.

Nubia, just above the Third Cataract, whence come also an immense quantity of cups and bowls of this very unmistakable ware, though whether this pottery was actually found with these objects we are unable to say from Reisner's brief reports. Further, it should be pointed out that, apart from Abadiyeh and Kerma, these horn-protectors are unknown, so far as we are aware. This makes the double connection all the more remarkable. Again, Kerma produces large fly ornaments and daggers, all of precisely the same rather rare types found with these pots at yet another place—Wady Halfa. Returning to the *Diospolis Parva* plates, it will be further noticed that these beautiful bell-shaped black-topped cups, so often called pan-grave ware and classed as C-group, occur at Abadiyeh only in this unique grave, E 2. They are not found in any of the other plates[1] which illustrate the pure pan-grave civilization. They also differentiate themselves from the black-topped pottery found in the pan-graves by their exceptionally fine polish, by the ring of grey dividing the black from the red, and also by their shapes. They have already been shown to belong to a very definite class of objects, and the presumption, therefore, is that these delicate cups and their associated civilization are not pan-grave. Now inquiry shows that, though they have many times occurred in other horizons, they have only once been found with distinctive pan-grave objects, namely, at Wady Halfa, where the grave containing them also produced some of the true pan-grave shell strips for bracelets.[2] It also produced the dagger and flies, which are not pan-grave, but similar to those from Kerma.

The thin black-topped cups with flared rims and a grey band have been found at :—

1. Abydos, in a shaft tomb with chambers, with inlay (from a coffin ?), blue glaze vase and shawabti figure, &c. (P., *C.A.*, ii, pp. 61, 62, Pl. xiii, 11, with fig. 8 of same plate.)
2. Abadiyeh, as already related, in an isolated grave, E 2. (P., *D.P.*, Pl. xxxviii, p. 45.)
3. Hu, not in the pan-grave Cemetery X, but in the Intermediate Cemetery YS of "Egyptian" burials in coffins in deep pits. (P., *D.P.*, p. 51.)
4. Qurneh, with an extended burial in a coffin of the XVIIth Dynasty. (Petrie, *Qurneh*, Pls. xxii, xxviii, p. 8.)
5. Shellal, in Cemetery 7, where the pots are classed as C-group, but no record has been published to show from which grave they came. (*A.S.N. Bull.*, no. 7, p. 3. The cemetery is described in *A.S.N.*, 1907–1908, pp. 52–56.)
6. Kubban, in Cemetery 110. In graves different from the C-group, and sporadically in the New Kingdom graves. (*A.S.N. Bull.*, no. 7, p. 3.)
7. Wady Alaqi, in Cemetery 113, where the group of graves containing these pots was separate from the C-group graves. (*A.S.N. Bull.*, no. 7, p. 10.)
8. Wady Halfa, with a contracted body showing the C-group type of burial with head to the east, and shell-strip bracelets of the pan-grave and C-group civilizations, and a dagger and fly ornaments of the New Kingdom similar to those of the Kerma burials. (MacIver and Woolley, *Buhen*, Pls. li, lii, pp. 174, 175.)
9. Kerma in Nubia, in great quantities. (Reisner, *Boston Mus. Fine Arts Bull.*, xii, fig. 14. *A.Z.*, 1914, Taf. 16, fig. 10, p. 37, no. 15.)

These cemeteries at Kerma are of the greatest interest, as they are quite un-Egyptian, and also unlike the ordinary C-group of the Nubian Survey. Here these flared black-topped cups,

[1] P., *D.P.*, Pls. xxxix, xl; P., *G.R.*, Pls. xxv, xxvi, or in this volume.

[2] MacIver and Woolley, *Buhen*, p. 175.

and other vessels of the same pottery, were found in such great quantities as to suggest that the other sporadic finds are finally referable to this civilization. Though at present we are not in a position to say whether the pots and the objects were actually found in the same graves, it is at least significant that so many of the objects already found elsewhere with this black-topped pottery are once more found on the same site. For here, at Kerma, once more are found a dagger and flies similar to those of Buhen (*Ä.Z.*, 1914, Taf. iv), and also knives and objects seen to be rams' horn protectors (*Ä.Z.*, 1914, Taf. iv, vi, 12), similar to those from grave E 2 at Abadiyeh (P., *D.P.*, Pl. xxxviii). The knives from the two places are not similar in type, but show that both peoples used such implements. All these are things that are not found in pan-graves.

Thus this people of the black-topped cups with the flared rims and grey band would seem to be neither the pan-grave people nor yet ordinary C-group people. In Egypt they would seem to have been a little later than the pan-grave people, hence it is not surprising that we did not find these cups in our pan-grave cemetery. A few points which may bear on their connection with Egypt have been set out on p. 7.

Having eliminated this civilization, we can now proceed with the analysis of that of the pan-graves. Apart from borrowed objects, such as the *kohl*-pots, tweezers, axes and pottery, the pan-grave civilization is something quite distinct so far as Egypt is concerned. While it shows affinities to various others, the C-group of Nubia is the only one which can be said to be really connected with it, and even here the connections are mainly confined to the later phase of the C-group period. The pan-grave civilization has a certain resemblance to that of the pre-dynastic peoples, primarily due to its use of contracted burial in a circular or oval grave, also to the employment of galena and malachite, of palettes for grinding paint, of red-polished vases with or without black tops, and of incised ware, though the pottery of the two ages differs entirely in shape, clay and manufacture. These later people showed an appreciation for pre-dynastic pottery, as we found a specimen re-used.[1] The Nubian C-group people also exhibited this taste.[2]

The various affinities which the pan-grave civilization exhibits are set out below, grouped under the different ages and countries.

1. *The Early Pre-dynastic Age.* Resemblances are found to this age in the use of black-topped pottery, which died out in Egypt in the later pre-dynastic age; in the little use made of manufactured amulets, which did not become common till the later period; in the burial of dogs, reported from Hu[3]; in the use of an unusual shape of pottery P 3, which occurs at this period in Nubia.[4]

2. *The Middle Pre-dynastic Age.* In the burial of beetles,[5] which is a middle pre-dynastic custom, and in a fondness for re-using pottery of the W and D classes, which belong to the middle pre-dynastic age.[6]

3. *The Late Pre- and Proto-dynastic Age.* In the burial of large quantities of scented ointment,[7] and in the use of *ballâṣ* ware (W and D classes in the early times, Buff in the pan-graves) to contain it. In the use of prepared animal-

[1] See Pl. XIV, and p. 41.

[2] See the references on p. 9.

[3] P., *D.P.*, p. 48. The burial of dogs was an early pre-dynastic custom, for it is reported from a grave datable to S. D. 36 (P., *N.B.*, p. 26, no. 286), and on p. 13 of the same volume it is reported with C pottery (polished red pottery with white cross-lines), which died out in early pre-dynastic times.

[4] *A.S.N.*, 1907–08, Pl. 60 a, no. 13.

[5] As reported in P., *D.P.*, p. 48. For the pre-dynastic beetles, see p. 33 of the same volume.

[6] For references, see p. 9.

[7] P., *N.B.*, p. 11; Petrie, *Tarkhan*, i, p. 9, &c.

skulls.[1] The veneration of these may well be connected with that of another horned head of this period, i.e., the stag's head sculptured on the proto-dynastic Min-statue of Koptos.[2] These same proto-dynastic statues exhibit yet another resemblance to the pan-graves in the large shells, which are usually very rare in Egypt, but which here figure conspicuously among the sacred emblems on all three statues.[3] The pan-graves, in their fondness for small shells other than cowries as ornaments resemble the early dynasties of Nubia,[4] and those of Egypt in their use of gold imitation shells.[5] They also resemble the pre-dynastic people in this respect (MacIver and Mace, *El Amrah and Abydos*, p. 49), though naturally such shells may be found occasionally at other periods.

The use of glazed crystal is probably another link with the pre- to proto-dynastic age, which was the most flourishing period of the art.[6]

The sandals of the pan-grave people have been seen to resemble those of the Narmer palette more than any others.[7]

A variety of the pattern fig. 9 is used in the pan-graves on the H pottery. This pattern is not general in Egypt, but occurs mostly on proto-dynastic objects[8] and Middle Kingdom coffins.[9]

Fig. 9.

The bowl of type B 5 resembles in shape pottery of the late pre- or proto-dynastic age.[10] At the latest these bowls last into the Old Kingdom.

The peculiar pot P 3 resembles a Nubian early dynastic shape.[11] It does not actually seem to be an Egyptian shape of this period, though it would not be out of place among Egyptian pottery. Later it is found in the XIIth Dynasty and in the Later Intermediate Period.[12]

4. *The XIIth Dynasty.* Several of these pre- to proto-dynastic features are found again in the XIIth Dynasty. They are: The fondness for shells.[13] The use of the hatched or bandaged pattern.[14] The shape corresponding to the bowl P 3.[15] Another resemblance to the XIIth Dynasty is to be found in the use of gold collar-beads (p. 23).

Passing to the different peoples and countries to whom the pan-grave civilization shows affinities, we notice:—

1. *Ancient Nubia.* In the large use it made of shells bored for suspension the pan-grave civilization resembles Ancient Nubia, where the custom seems to have been common all through the Early Dynastic and B-group periods,[16] though it seems largely to have died out in C-group times. To a limited extent such shells were

[1] P., *D.P.*, p. 48; P., *R.T.*, ii, Pl. vii, 8; *Tarkhan*, i, Pl. ii, 4, where an ox skull is set on a shrine. This survived late, associated in writing with the shrine of Sebek at Crocodilopolis in the Fayum (for a sculptured representation see P., *L.G.M.*, xxix), and it appears in the XIXth Dynasty at Abydos. Caulfield, *The Temple of the Kings at Abydos*, Pl. vii. For much information on the whole subject of bucrania in Egypt see Lefébure, *Le Bucrâne, Sphinx*, x, pp. 67 ff.

[2] Petrie, *Koptos*, Pl. iii, 1.

[3] Petrie, *Koptos*, Pl. iii, 1, 2, 3.

[4] *A.S.N.*, 1907–08, volume of plates, p. 18, Pl. 66 E.

[5] R., *N.D.*, i, Pls. 6, 7, p. 139; cf. also Petrie, *Tarkhan*, ii, Pl. xxxv, 1619, xxxvi, 1819, xlii, 763, 797, 1438; Junker, *Friedhof in Turah*, Pl. xlix, b.

[6] For references, see p. 22.

[7] See p. 25.

[8] Cf. seals, Quibell, *Hierakonpolis*, i, Pl. xv, 6; pottery, Petrie, *Abydos*, i, Pl. liii, 14, 17, 18.

[9] Lacau, *Sarcophages*, i, Pls. xvi, xxiv; cf. P., *G.R.*, Pl. xxiv, &c. In the XVIIIth Dynasty, it occurs on the strange little wooden box otherwise decorated in Syrian (?) style; P., *K.G.H.*, xviii, 31.

[10] Cf. P., *N.B.*, Pl. xli, 78 a; *Abydos*, i, Pl. xxviii. 32; *Tarkhan*, i, Pl. xlviii, 37 c; *El Kab*, Pl. x, 33, p. 19, xii, 52; *Hierakonpolis*, ii, Pl. lxix, 21.

[11] *A.S.N.*, 1907–08, Pl. 61 a, 22; *A.S.N.*, 1908–09, Pl. 44 a, 1.

[12] Quibell, *Excavations at Saqqara*, 1906–07, Pl. xxxix, 1; P., *C.A.*, ii, Pl. xxxi, x 64.

[13] For references, see p. 17.

[14] For reference, see note [9] above.

[15] See note [12] above.

[16] *A.S.N.*, 1907–08, volume of plates, p. 18, 66 E.

also used in the Egyptian proto-dynastic period.[1]

Another connection is to be found in the weaving of hair (giraffe's or elephant's?), of which we found a specimen at Balabish in the little bag, Pl. IV, 2, which art was practised at Kerma in Nubia.[2]

2. *Ancient Sudan.* In the use of hatched pottery and of a lip-stud the pan-graves resemble this country, for these ornaments have been found near Roseires on the Blue Nile, and also at Gebel Moya in the Senaar Province.[3] Another resemblance is probably to be seen in the braiding of the men's hair (see p. 11).

3. *Modern Sudan.* It resembles the modern Sudan in the use of clothing of fine leather thongs, and modern Abyssinia in the probable braiding of the men's hair, and also the Negroids of South Kordofan.[4] There is a further resemblance in the use of elephant's hair, for the natives of the Sudan make bracelets of this material to-day. The probable plaiting of a man's hair by the pan-grave people resembles the usage of Abyssinia.[5]

4. *Ancient Libyans.* It resembles these people in the use of red-dyed leather garments[6] and of fringed leather costumes.[7] The dressing of the hair in ridges (?) and plaits by the Libyans resembles the probable plaiting of a man's hair in the pan-graves, and the decoration of the cross-bands of the Libyans seems to imply a connection with the shell-strip bracelets of the pan-grave people.[9]

5. *Mediterranean Area.* Connections are to be seen here in the use of buerania,[10] in the habit of decorating bones with paint, and in the shape of the bowl P 3. The use of small jugs of black punctured ware should be referred to here, though no doubt these were importations.

Thus, then, this intrusive civilization seems to be connected with various ages and civilizations, but mostly with the South and with the pre- to proto-dynastic age.

We now come to a discussion of the resemblances and differences observable between the pan-grave civilization and that to which it is clearly allied, the C-group. While there are striking resemblances between the two, such as the burial of animals' heads and horns, the use of shell-strip bracelets, pierced leather work, &c., yet even here in such important details as the orientation of the body, burial of ashes, types and decoration of the pottery, the differences are profound. It is clear from the evidence of the great C-group cemetery no. 101[11] that the latest phase of the C-group civilization is in the main the same as that of the pan-graves of Egypt. This last therefore differs to the same extent from the earlier phases of the C-group culture.

So far as is possible the differences between the pan-graves and the earlier C-group are here specified and discussed :—

1. *Graves.*

The pan-graves have no superstructure.

The earlier C-group has a cairn or superstructure (*A.S.N.*, 1909–10, pp. 13, 14).

2. *Orientation.*

The pan-graves orient with head to N. face to W.

The earlier C-group with head to E. and face to N. (*A.S.N.*, 1909–10, p. 13,

[1] For references, see note [illegible] on p. 15.

[2] *Ä.Z.*, 1914, p. 37, no. 9.

[3] Wellcome, *Report Brit. Ass.*, 1912, p. 617.

[4] Kindly communicated by Dr. Seligmann. For Abyssinia, see p. 11.

[5] For references, see p. 11.

[6] N., *B.H.*, i, Pl. xlv, if these figures actually are Libyans, as is usually supposed.

[7] Herodotus, iv, 189.

[8] For references, see p. 11.

[9] For references, see p. 20.

[10] P., *D.P.*, p. 26.

[11] *A.S.N.*, 1909–10, pp. 138–140.

though this change started in pre-pan-grave times, p. 15, no. 3).

3. *Ashes.*

The pan-graves never deposit ashes.

The earlier C-group deposits ashes (*A.S.N.* 1909–10, pp. 18, 19).

4. The pottery of the pan-graves shows many differences from that of the C-group.

(*a*) *Quality.*

Our pan-grave pottery of each of the P, B and H classes was singularly free from chopped straw, and was remarkable for its thinness, the majority of the walls being about 3 mm. in thickness, but varying from 2 to 4 mm. If we understand aright, this thinness is peculiar to the later C-group, since Classes I, II, which are not named as late classes,[1] are described as "of fairly thick ware," showing "a considerable admixture of *tibn*."[2] But when we come to Class XI, which is stated to belong to the later C-group period,[3] and the shapes of which[4] correspond with our pan-grave bowls, we find it described as "thin polished black, brown and red ware."[5] Hence it appears that the thinness of the pottery differentiates the later C-group (i.e. the pan-grave age) from the earlier.[6]

(*b*) *Forms.*

While the gourd-shaped bowls with convex sides (as B 7, H 4, H 5 on Pl. XIV) are the common shape in the C-group, they are not very common in the pan-graves.

The straight-sided bowls, on the other hand, such as B 1, 2, H 1, which are very rare even in the unclassified C-group,[7] and so may come from late graves, are one of the commonest[8] pan-grave types.

The moulding (as on types B 3, H 2, 3) is very rare in C-group pottery, and seems only to have been introduced in the latest or pan-grave phase, as the bowls on which it is found are of tha age and similar to our own.[9] It is common in the pan-graves.[10]

The collar, which is common in the pan-graves[11] (Pl. XIV, B 4, 5, 6), is rare in the unclassified C-group.[12] It no doubt is another introduction to the C-group pottery made in the latest or pan-grave phase.

[1] *A.S.N. Bull.*, no. 6, p. 3. Cf. Reisner's description of "thick black-topped bowls," which continue from the B-group into the C-group, *A.S.N.*, 1907–08, p. 333, 3.

[2] *I.e.*, chopped straw; *A.S.N.*, 1908–09, p. 19, no. 1.

[3] *A.S.N. Bull.*, no. 6, p. 3, no. iii.

[4] *A.S.N.*, 1909–10, Pl. 32, b, 1–3; cf. our Pl. XIV, H 1, 2, 3.

[5] *A.S.N.*, 1909–10, p. 19, Class XI.

[6] Softness and thickness is said to be a characteristic of another of the wares, the black incised, of the C-group pottery of the pre-pan-grave age. *A.S.N.*, 1909–10, p. 15, no. 4.

[7] *A.S.N.*, 1907–08, figs. 37, no. 3, 99, no. 8. There are none in the plates or in *A.S.N.*, 1908–09, and only the three of *A.S.N.*, 1909–10, Pl. 32, b, 1, 2, 3, which are now known to belong to the pan-grave or very latest division of the C-group civilization. *A.S.N.*, 1909–10, p. 19, type XI; *Bull.*, no. 6, *A.S.N.*, p. 3, iii.

[8] P., *D.P.*, Pl. XI, 17, 16, 36, 78, 1, 36, 29, 67, 7, 8 (2 specimens); P., *G.R.*, Pls. XXV, 27–40, XXVI, 74–80, 96, 97.

[9] *A.S.N.*, 1909–10, pp. 18, 19, type XI, Pl. 32, b 3; *A.S.N. Bull.*, no. 6, p. 3.

[10] Besides our drawings here referred to, see P., *D.P.*, Pl. XXXIX, X 48, Pl. XI, 36 twice; P., *G.R.*, Pl. XXV, 46, 47, 49, 53, 54, 56; XXVI, 82, 84, 86, 101, 102, 114, 116, 117.

[11] See also P., *G.R.*, XXV, 48, XXVI, 98.

[12] *A.S.N.*, 1907–08, fig. 37, nos. 4, 11; fig. 118, no. 3. There are none in the plates nor yet in those of the *A.S.N. Reports* for 1908–09 and 1909–10.

(*c*) *Decoration.*

The pan-graves decorate only the upper part of the bowl[1] (with only two exceptions, P., *D.P.*, Pl. xl., 36, and probably the similarly decorated vase, type H 3, Pl. XIV). The earlier C-group decorates the whole surface[2] (*A.S.N. Bull.*, no. 6, p. 4, Classes II, III, cf. *A.S.N.*, 1907–08, Pl. 61 b; *A.S.N.*, 1908–09, Pl. 39 f, Pl. 40, Pl. 46 d; *A.S.N.*, 1909–10, Pls. 29, 31, 31).

The arrangement of the hatched patterns on the pan-grave pottery is totally different from that on the great majority of the C-group pots. Though here again the late C-group in Classes XI, XII, varies from the early classes and resembles the pan-graves. A study of the great collection of potsherds published by Weigall[3] will convince the reader of the complete difference between the Nubian hatched ware and that of the pan-graves. The earlier C-group Classes II, III,[4] and many specimens in the plates of the reports are decorated all over the surface, and the hatched spaces are divided one from another by plain areas. On the other hand, in the pan-grave classes the decorated area is never broken up by plain spaces, and with a single exception[5] is confined to a portion of the pot only. A comparison of the pan-grave pottery plates with the C-group plates[6] will bring out the difference. By far the most common C-group design is what might be called a strap pattern, consisting as it does of narrow bands of this hatched ornament. Nothing approaching this has yet been found in the pan-graves. In the diamond pattern[7] the pan-grave approaches the C-group most nearly, yet even here the difference is very great, largely owing to the plain spaces, but also to the grouping.[8] The rare C-group variation of turning the diamond sideways[9] is entirely lacking in the pan-grave pottery. In this use of plain spaces, especially when applied to a thick soft black polished ware, the C-group is reminiscent of the predynastic pottery,[10] but this similarity does not extend to the pan-graves.

[1] It may put a pattern on the bottom of the bowl also, P., *D.P.*, Pl. xl, 25, p. 47. The latest C-group does the same, *A.S.N.*, 1909–10, Pl. 35, d, and p. 18, fig. xi, said, on p. 3, *A.S.N. Bull.*, no. 6, to belong to the later type of C-group graves.

[2] The tendency to drop the decoration of the whole surface and to confine attention to the rim is seen at work in what is called the later C-group, which to judge by its pottery is not as late as the pan-graves. Here on some bowls (such as *A.S.N.*, 1909–10, p. 131, fig. 180; p. 133, fig. 187; p. 134, fig. 188, 1; p. 135, fig. 195, 1, &c.), the decoration has become reduced to a few lines radiating from the base to the still heavily decorated rim. Then again, on other bowls (such as p. 118, fig. 138, 5; p. 119, fig. 143. 6; p. 127, fig. 169, 4, &c.), even this decoration has disappeared, and only the strongly marked decoration of the brim is left.

[3] *Antiquities of Lower Nubia*, Pls. lxxvi to xciv; cf. also MacIver and Woolley, *Areika*, Pls. 10, 11, 12.

[4] *A.S.N. Bull.*, no. 6, p. 4.

[5] P., *D.P.*, Pl. xl, 36, p. 47.

[6] *A.S.N.*, 1907–08, Pl. 61, b; *A.S.N.*, 1908–09, Pl. 39, f, 40, 46, d; *A.S.N.*, 1909–10, Pls. 29, 30, 31.

[7] See Pl. XIV, H 3; P., *D.P.*, xl, 36; P., *G.R.*, xxvi, 105, 114, and compare with *A.S.N.*, 1907–08, Pl. 61, b, 1, 6; *A.S.N.*, 1908–09, Pl. 39, f, 2, 3, Pl. 40, a, 1, 2, 3, 6, Pl. 46, d, 4; *A.S.N.*, 1909–10, Pl. 29, b, 5, c, 4, 6, 7, Pl. 30, b, 1.

[8] *A.S.N.*, 1907–08, Pl. 61, b, 6; *A.S.N.*, 1908–09, Pl. 39, f, 3, Pl. 40, a, 1, Pl. 46, d, 4; *A.S.N.*, 1909–1910, Pl. 29, a, 2, 6, b, 2, 3, 4, c, 1, 3, Pl. 30, a, 2, 3, b, 4, 5, 8, Pl. 31, a, 2, 5, b, 1, 5.

[9] *A.S.N.*, 1908–09, Pl. 39, f, 2; *A.S.N.*, 1909–10, Pl. 39, figs. 1, 2, 6.

[10] Compare the patterns of such bowls as *A.S.N.*, 1908–09, Pl. 40, a, 2, 6, with P., *N.B.*, xxx, 24, 26, 28: the rectangular arrangement of the incised bands of *A.S.N.*, 1907–08, fig. 118, no. 17; *A.S.N.*, 1908–09, fig. 29, no. 330, with P., *N.B.*, xxx, 6, and so on.

The white filling of the incised patterns on bowls, though common in the C-group, does not occur in the pan-graves, and is not said to occur in the late C-group.[1]

The red, yellow, blue and green painted details of the C-group Class X[2] are entirely lacking in the pan-graves, and are presumably absent from the late C-group.

The ornament of impressed triangles in various groupings[3] is entirely lacking in the pan-graves, and is presumably absent from the late C-group. Perhaps its place in the pan-grave pottery is taken by the rows of pit marks at the brim (see types H 3, 4).

The coarse, smooth, red pottery bound with chopped straw[4] has never been found in the pan-graves. This ware evidently resembles the rough ware, R, of the pre-dynastic age in its clay, but not in its shapes. Its presence once more connects the C-group with, while its absence divides the pan-graves from, the pre-dynastic civilization.

The use of shells bored for suspension and otherwise by the pan-grave people connects them with the C-group people, while the much greater use made of them by the former differentiates them strongly from the latter, in whose graves such shells are comparatively rarely met with.[5] Further, in the C-group many of the ornamental shells are cowries with the backs cut off, a form not found in the pan-graves.

Yet other differences between the pan-grave and earlier C-group civilizations will be found in the—

Presence in the pan-graves of:—

Horn strigils (?). Pl. XII, 6, 7, 8.

Horn bracelets. Pl. XII, 5. P., *G.R.*, Pl. X, F. p. 20.

Lip-stud (?). Pl. VII, 2.

Scented ointment.[6] p. 14. P., *D.P.*, p. 47.

Copper axes.[7] Pl. XIII, 1, 2.

Arrows. P., *G.R.*, Pl. X, F. p. 20.

Bracers. Pl. XII, 1, 2, 3.

Bow-strings (?). Pl. III, 2, no. 11.

Net bag of elephant's hair. Pl. IV, 2.

Tiny blue glaze beads. Type 3.

Palettes. Pl. XIII, 16, 17, 18. p. 34; cf. *A.S.N.*, 1907–08, p. 334, 7.

Large shells other than *kohl*-shells. Pl. II, 2.

Cords (?) of plaited leather. Pl. X.

Fringed leather. Pl. X, 1. P., *G.R.*, p. 20.

Beads sewn into the seams of leather. Pls. X, 1, XI, 2. P., *G.R.*, p. 20.

Mats of types figs. 1 and 2,[8] p. 5. See P., *G.R.*, Pl. X, F, for type.

[1] *A.S.N. Bull.*, no. 6, pp. 3, 5.

[2] *A.S.N.*, 1909–10, pp. 15, 19, Pls. 39, 40. See also *A.S.N.*, 1908–09, Pl. 39, f, 2; Weigall, *Antiquities of Lower Nubia*, Frontispiece and Pl. A.

[3] *A.S.N.*, 1907–08, Pl. 61, b, 5; *A.S.N.*, 1908–09, Pl. 40, a, 2, 6, c, 3, 5, 6, Pl. 46, d, 1, 2, 3, 5; *A.S.N.*, 1909–10, Pls. 29, 30, 31, 32, c; *A.S.N. Bull.*, no. 6, Classes IA, II, III.

[4] *A.S.N.*, 1908–09, Pl. 17, and *A.S.N.*, 1909–10, p. 18, Class IV.

[5] *A.S.N.*, 1907–08, p. 54, no. 183; *A.S.N.*, 1908–09, p. 56, no. 6, &c.; *A.S.N.*, 1909–10, p. 110, no. 51, p. 113, no. 8, p. 114, no. 13, &c.

[6] Out of all the C-group material now published only one possible case is reported. See *A.S.N.*, 1908–09, p. 107, no. 103.

A single stone axe-head is reported by *A.S.N.*, 1909–10, p. 134, no. 412.

[8] Mats of these types are not indicated in the *A.S.N.* publications, whereas others are. For references see the next section, dealing with the classes absent from the pan-graves.

Absence from the pan-graves of:—

Button seals. *A.S.N.*, 1907–08, Pl. 71 a, nos. 14, 15, 16, 36; 1908–09, Pl. 42 b, nos. 30, 32, 33, 34, p. 160, no. 14; 1909–10, Pl. 36 e, nos. 17, 18, 20.

Finger rings. *A.S.N.*, 1908–09, p. 83, no. 225, and often.

Model pots. *A.S.N.*, 1908–09, p. 19, no. 1, 4, Pl. 39 e, &c.

True needles with eyes. *A.S.N.*, 1907–08, Pl. 66 b, no. 45, 46 ?, p. 164, no. 85.

Feather fan (?). *A.S.N.*, 1907–08, p. 195, no. 5; 1908–09, Pl. 39 c, but perhaps early Dynastic, not C-group.

Dagger. *A.S.N.*, 1909–10, p. 17, 117, no. 111, p. 139, no. 434.

Mirrors. *A.S.N.*, 1907–08, Pl. 65 d, 2, 3; 1908–09, Pl. 39 c; 1909–10, Pl. 37 c, 4.

Steatopygous dolls. *A.S.N.*, 1908–09, Pl. 39 a, b; 1909–10, Pl. 37 a, d, 1, 2.

Bead cloth. *A.S.N.*, 1908–09, Pl. 39 d, p. 81, no. 226. A piece from the C-group at Faras is to be published shortly by the Oxford Expedition to Nubia.

Porphyry (?) beads. *A.S.N.*, 1907–08, p. 161, no. 28; 1908–09, p. 85, no. 331, Pl. 56, 6; 1909–10, Pl. 37 e, 2, and often.

Split cowries. *A.S.N.*, 1907–08, Pl. 66 c, 7; 1908–09, p. 84, no. 310, and often.

Objects, called buttons (?). *A.S.N.*, 1907–08, Pl. 70 b, 15; 1908–09, Pl. 37 b, 2.

Diagonally woven matting. *A.S.N.*, 1907–08, p. 164, nos. 73, 85, p. 165, no. 86, p. 186, no. 159, p. 223, no. 423, &c.; 1909–10, p. 17.

Mat of bound rushes. *A.S.N.*, 1907–08, p. 267, no. 257, &c.

Among other resemblances will be found:—

Burial of animals' skulls and horns, which are often painted. Pl. III, 1. P., *D.P.*, p. 46; P., *G.R.*, p. 20; *A.S.N.*, 1909–10, p. 17, &c.

Deposits without burial. Pl. XVII, 182, 233. P., *D.P.*, p. 45; *A.S.N.*, 1907–08, p. 188, no. 4; p. 224, no. 428; 1908–09, p. 119, no. 75; 1909–10, p. 130, nos. 265, 266.

Awls of bone or copper. Pls. VII, 4, IV, 1. *A.S.N.*, 1907–08, p. 334, no. 6, p. 188, no. 7, p. 224, no. 426, &c.

Flint flakes. Pl. IV, 1. *A.S.N.*, 1907–08, p. 268, no. 277, p. 224, no. 428, &c.; 1908–09, p. 58, no. 105, p. 109, nos. 507, 520, &c.

Black feathers. Pl. XVI, 213. *A.S.N.*, 1908–09, p. 58, no. 108, p. 60, no. 121, p. 64, no. 1. Also from the C-group at Faras, to be published shortly by the Oxford Expedition to Nubia.

Penannular ear-rings. Pl. VII, 1. *A.S.N.*, 1907–08, Pl. 70 b, 6, 8[1]; 1908–09, Pl. 37 b, 7, 8, p. 84, no. 312.

Kohl. As evidenced by the *kohl*-pots in Pl. XIII, 12, 13, 14; *A.S.N.*, 1909–10, p. 17.

Shell and black glaze beads. Types, 1, 8. *A.S.N.*, 1907–08, Pl. 70 b, no. 1, p. 184, no. 137, p. 55, no. 185, 187, &c.

The arrangement of these beads shown in string 8, Pl. VIII.

Gold collar beads. Type 24, Pl. VIII. *A.S.N.*, 1907–08, Pl. 70 b, 17; 1908–09, Pl. 56, 3.

Carnelian spheroid beads. Type 12. *A.S.N.*, 1907–08, Pl. 70 b, 17.

Carnelian barrel beads. Type 21. *A.S.N.*, 1907–08, p. 161, no. 25; 1908–09, p. 84, no. 261.

Crystal beads glazed blue. Type 5. *A.S.N.*, 1907–08, p. 162, no. 41.

[1] Not the long object under which is the figure 8, but the small penannular ring alongside it.

Glazed cylinder beads. Type 16. *A.S.N.*, 1907–08, Pl. 70 b. 3.

Shell-strip bracelets. Pl. III. 3. *A.S.N.*, 1909–10, p. 132, no. 361, and often.

Noticeable absence of amulets, except for a very few small ones. Pl. VIII. *A.S.N.*, 1907–08, p. 338, 8.[1]

Tortoise-shell bracelets. Pls. III, 2, 2, XII, 10. *A.S.N.*, 1908–09, p. 82, no. 419, p. 83, no. 235, &c., but types not stated.

Sandals. Pl. IX. *A.S.N.*, 1908–09, p. 82, no. 383, p. 83, no. 235, p. 178, no. 102, &c., but types not stated.

Leather (occasionally dyed red). p. 26. *A.S.N.*, 1908–09, p. 84, no. 249, and often.

Pierced leather work. Pls. IV, 2, X. 2. *A.S.N.*, 1908–09, p. 60, no. 121.

By means of the foregoing tabulation of resemblances and differences we are able to form some conclusion as to how intimately the pan-graves are connected with the C-group of Nubia. We find that even here, unmistakable as the connection is, our intrusive pan-grave civilization maintains its isolation, and the relationship is not close.

It is evident that the pan-grave civilization of Egypt is practically identical with that of the latest phase of the C-group civilization. But here the parallel ceases, for the divergence from the earlier C-group is profound, and seems too complete to allow of explanation, on the hypothesis either of development or of merely increasing poverty. We will not here include such a change as that of the orientation of the burials, as this seems to have occurred during an earlier phase of the C-group age, and so may be due to development. Nor yet do we include the ornamentation of only a small portion of the bowl instead of the whole, nor the disuse of the white filling for incised patterns, nor the discontinuance of the painting of polychrome ware, all of which might be due to poverty or degeneracy. Nor yet, again, will we rely upon such a change as the disuse of finger rings, which might be due to the same causes. Other changes, again, such as the burial of great quantities of scented ointment or the use of bows and arrows, might be discounted as due to increased contact with Egypt. But after eliminating these differences which are susceptible of such simple explanations, there remain yet a number which cannot be so treated. Though contact with Egypt might do so, yet increasing poverty would not account for the disuse of the worse quality pottery, the smooth coarse red ware, Type IV; it would the rather tend to increase its use. Neither would it lead the people to replace the thicker clays by a finer quality of thin stone-hard ware; it would the rather tend in the opposite direction. Poverty would hardly cause the people to abandon the old shapes of pottery and adopt new ones, such as straight-sided bowls, or bowls with a moulding, or a collar, nor yet would it cause them to use large numbers of shells, nor create a desire for curved horn implements (strigils?), nor even for lip-studs. Nor yet would it lead them to discontinue the making of mats of a diagonal weave or of bound rushes, and to substitute those of our types 1 and 2 (see p. 5). Contact with Egypt could not have done these things, as contemporary Egypt does not appear to have had the new classes to give.

Therefore we cannot look to development, or degradation, or contact with Egypt, to account for more than a few of these changes which took place in the C-group civilization in its latest or pan-grave phase. Moreover, it must be remembered that at the time when these changes took place there was a movement of the people from

[1] This, however, is difficult to reconcile with the statement on p. 335, no. 8, which can only be comparative and mean that small amulets are not unknown as in the pan-graves.

Nubia to South Egypt, and it has been shown (p. 44) that mingled with them were a few representatives of a different civilization, that of the black-topped cups with flared rims and a grey band.

Now two of the differences between the pan-grave and the earlier C-group peoples were found to be the use, by the former, of woven elephant's (?) hair and lip-studs. These suggested connections with the Sudan, while the lip-stud also formed a link between the pan-grave people and those of the civilization of the black-topped cups with a grey band and flared rim. At about the period of the pan-grave civilization, we know there was another important civilization in the Sudan not far from the C-group people, which is undoubtedly related to that of the black-topped cups with a grey band and flared rim. This is the civilization recently brought to light at Kerma, and we already know it to have used woven hair (giraffe's ?), and to have used small hard-stone palettes, to have manufactured thongs of woven leather, to have made pottery remarkable for its thinness and quality,[1] to have used a moulding at the rim of some of its bowls,[2] and to have given straighter sides to many of them.[3] Here, then, we have six of the characteristics the origin of which we are seeking to trace, as they have been shown to be among those differentiating the pan-graves from the earlier C-group. Further, we know that a few forerunners of this civilization were so closely associated with our people as to have been called by the first discoverers pan-grave in Egypt and C-group in Nubia. The question then arises, can contact with this people have been accountable for any part of the extreme difference between the earlier C-group and its derivative the pan-grave civilization ?

Unfortunately at present we can give no definite answer to the question, for we are not yet in a position to judge of the movements, or influence, or the details of the civilization of this race, and it is never safe to prophesy. Prophecy in this case would be the more rash as formidable differences are encountered between the two civilizations, which will require much consideration in a far fuller light before any definite conclusions can be reached. We therefore content ourselves with drawing attention to the above coincidences, and await with eagerness any further information which will throw light upon the suggested connection between the Kerma race and some of the points which go to make up the difference between the earlier C-group and the pan-grave civilizations.

[1] *A.Z.*, 1914, p. 37, nos. 9, 11, 13, 15. We are not told what the C-group sandal was like, so we are prevented from comparing it with the pan-grave types, which have shown themselves to be unusual. We can, however, point out that the very unusual arrangement requiring two holes at the toe is found again at Kerma (*A.Z.*, 1914, Pl. v, fig. 9; better, *Boston Bulletin*, no. 69, fig. 29), though beyond this the resemblance does not go.

[2] *Boston Museum of Fine Arts Bulletin*, xii, no. 69, fig. 14. The first bowl on the left of the third row of the top photograph and the first bowl on the left of the third row of the lower photograph exhibit this feature.

[3] Had we cared to speculate further we might have suggested that the shape of the pan-grave bowls with the slightly flared rims, which we had supposed to be a variety of the straight-sided ones, was a crude reminiscence of the shape of the beautiful black-topped cups with the flared rims so distinctive of the Kerma civilization. See P., *D.P.*, Pl. xl, 16, 1, 36, 29; P., *G.R.*, Pl. xxvi, 86, 117; *A.S.N.*, 1907–08, fig. 37, no. 3, p. 53; fig. 99, no. 8, p. 156. The last of these is earlier than the pan-grave age. If, as it seems, this shape is very rare in C-group times, this need only represent the earliest contact.

CHAPTER VIII.

OBJECTS FROM THE NEW KINGDOM CEMETERY.

Plates XVIII–XXV.

The position and appearance of the New Kingdom Cemetery have been described in Chapter I. Unfortunately it had been so completely worked out both by the Government and by native plunderers that only a very small portion was left to be excavated. From the small area left to us it was hardly to be expected that results of great scientific value would be obtained. We were, however, fortunate in obtaining a large number of objects of striking and unusual types, of which some description must here be given.

Plate XVIII, no. 1, B 170. Two views of a sandal of the ordinary New Kingdom type. The upper view shows the surface, and the lower shows the same sandal tilted on to its side to show both sole and edge. In this second photograph the sandal is so tilted that what was the lower ankle-strap in the first picture has become the upper in the second. The sandal is quite different from those of the pan-graves, for it is made by sewing together three thicknesses of leather with very fine neat stitching. This is well seen in the top picture, especially near the toe. It will be noticed in the lower picture that this fine stitchery does not pass through to the under side of the sandal. The ankle-straps are cut from these pieces of leather, and are bound round with strips of red-dyed leather. After these thicknesses have been sewn together to form the body of the sandal, an extra sole or clump has been sewn on with large coarse stitches passing right through to the surface. This secondary coarse stitching will be clearly seen at the upper edge of the top picture and at the lower edge of the bottom picture. The two pictures show the upper and lower side of the same stitches. In the lower picture it will also be seen that the clump is so arranged as to run out under the ankle-straps and so form a protection for them too.

The sandal was fastened to the foot by means of a toe-strap, which passes through all the thicknesses of the sandal, and is secured by means of a knot tied under the clump. The knot is visible in the lower photograph. The toe-strap is dyed red, and from a study of various drawings and models must have ended in a loop on the instep. Here it was met by a thong coming from the ankle-straps and passing through the loop. In the New Kingdom this latter thong does not pass round behind the ankle, but is fastened down to the sandal, as appears to be the case here. Our specimen is elongated into an elegant pointed toe. Thus in every way it differs from the earlier type, which is either square-toed or rounded at the toe; is made of a single thickness of leather; and generally, though not always, has the ankle-strap passing right round behind the heel instead of being fastened to the sole.[1]

A single pot was found with the sandal. It is figured on Pl. XXIII, no. 1. The grave was a shaft 2·40 × ·80 and 1·40 mm. deep. There were no chambers, but on the western side

[1] See above, pp. 24 ff.

there was a niche. The long axis ran north and south.

Plate XVIII, no. 2, B 15. The forepart of an extremely interesting sandal, the sole of which is made like the previous one, of three thicknesses of leather stitched together, an extra sole or clump having been added underneath. The guard to the ankle-strap which comes from the clump is seen at the lower side of the sandal. It curls up over the place whence the ankle-strap has been broken off. The sandal was secured by a toe-strap which passed into the sole. The special interest, however, lies in the fact that, in spite of this complete and usual apparatus for fastening on the sandal, uppers have been added, and have been laced together with four laces. One half with the laces remains and is quite visible in the illustration, but although the other has entirely disappeared its presence is suggested by the two remaining stitches on the upper side, which fastened something now lost.

Here then we actually have the transition from the simple sandal to the shoe, and it has not yet been realised that with the use of uppers the toe-strap has become superfluous as a means of keeping on the foot-gear. Unfortunately the heel is not preserved, to show whether the shoe was open at the back or was closed all round, as the remains of the stitching would rather seem to indicate. The idea of putting on an upper no doubt arose from the custom of broadening the strap or of inserting a protector over the instep to prevent chafing. This custom is as old as the first Egyptian Dynasty, for Narmer's sandals are shown with a very broad piece for this purpose.[1] It is to be seen from time to time throughout the length of Egyptian civilization, but generally in a much less exaggerated form. It comes to a head in the great sandals in the tomb of Rekhmire,[2] a little earlier than our specimen. Here, however, we are still dealing with a protector and not with the uppers of a shoe, as there is a space between the sole and the broadened strap, which has not yet been stitched down to it as in our example. In these all along the upper edge of the protector a row of dots is seen, no doubt the ends of the laces as found at Balabish. The sandal in Rekhmire, however, shows quite a number of laces, not merely four like ours. Along with the sandals of Rekhmire are others showing the more usual form of broadened strap.

Three *ushabtis* were found here, inscribed in hieratic as on Pl. XXIII, no. 2. They were quite roughly moulded in pottery and washed over with a greenish-grey mud wash. The pottery is shown on the same plate, nos. 3, 4, 5. Both the pilgrim flasks are red polished.

The grave was a shaft, 2·90 × 1·20 m., and 2·40 m. deep. The long axis ran north and south, and there was a niche on the east side, but no chamber.

Plate XIX, no. 1. A strange vessel of the ordinary Egyptian hard brown ware of the period, washed over with a coat of dull red. It has been broken off at the bottom. The base is solid; hence, as a receptacle, the vase is complete in itself. A pair of cones have been moulded on to the side less than half-way up, but the right-hand one has been broken off. They are pierced through, so that if the vessel were filled with water two streams would have spurted out.

Plate XIX, no. 2. From group B 66, the rest of which will be found on Pl. XXV. This is an important find, as it sets at rest the vexed question as to the use to which the small penannular rings of glass, alabaster, carnelian, gold, &c., were put. They are often described

[1] See fig. 7 on p. 24.

[2] Newberry, *Life of Rekhmara*, Pl. xvii, third register from the top and third row of sandals from the top. The more usual broadening of the strap is seen in the other sandals in the plate.

as "hair rings," but here one of them is seen in place in the lobe of the ear. It also appears to have been passed through a hole in the skin, and not to have been merely nipped on. The form of the ear is just distinguishable above it. This ring was of hard opaque white stone (chalcedony?). In the other ear at the time of discovery there were two more specimens similarly arranged: of these, one was of the same white stone, while the other was of carnelian.

The rest of the tomb-group (Pl. XXV) was interesting. No. 56 is a large portion of a figure vase in the form of a bird. It was made of a fine quality W and D[1] clay, as was the Decorated pottery of the middle pre-dynastic age. As in the latter, the decoration has been put on with red paint. This specimen had been fired sufficiently for the surface to begin to turn slightly yellow or white. Bird vases are most common in Egypt in the pre-dynastic age.[2] Bird vases, along with others in animal form, are quite common in the second period (early bronze (copper?) age) at Susa (DE MORGAN, *Délégation en Perse*, xiii, Pls. xxx, 9, xxxvii, 1, 2, 7, xxxviii, 2, 11, 12). Several are known from Tell-el-Mutesellim in North Palestine.[3] A duck vase, similar to that from Tell-el-Mutesellim, in blue faience, comes from Cyprus.[4] The subject will be found more fully treated on p. 56.

No. 57 is a vase of the ordinary *qulleh* ware, of a yellowish-white colour, and bears Syrianizing decorations in black and purplish red. The technique of painting pottery with a purplish red line between two black ones is interesting, in that it is found again at Bolus, between Tokat and Sivas in North-East Asia Minor,[5] and at Gezer and Lachish in South Palestine.[6] The crude clay of the Asia Minor pot has been covered with a whitish-yellow slip before receiving its decoration of a red line enclosed between two black ones, the result on the surface having just the appearance of an Egyptian *qulleh* ware pot with Syrianizing decorations. In Egypt this decoration is very often applied to pots made of the W and D clay, which, as remarked above, when well fired becomes *qulleh* ware, i.e., of a greenish-yellow or yellowish-white colour. This is the case in no. 78 of Pl. XXV.[7] In this connection it should be noted that much of the pottery of North Syria is made of a local variety of the W and D clay, which is, as a rule, of a greyer colour than the Egyptian. The details of some of the North Syrian shapes in this pottery are not unlike those of the Egyptian pots made of this clay, especially in the wide neck, sometimes fairly long, surmounted by a strong moulding.[8]

[1] The term W and D ware is used throughout this article for the hard close pink ware with white specks in it, which is so regularly used for the Wavy-handled and Decorated classes of pre-dynastic pottery. It is practically the same material as the *ballâs* and the *qulleh* of modern Egypt, but is generally only fired to a pink colour, whereas the modern examples being fully fired become greenish, or yellowish white. Therefore the expression W and D ware gives a better idea of the appearance than either the name *ballâs* or *qulleh* ware. However, when this same ware is sufficiently fired to look like the modern representatives, we use the name *qulleh*.

[2] Miss MURRAY, *Historical Studies*, Pls. xxii, xxiii.

[3] SCHUMACHER, *Tell el Mutesellim*, p. 89, Abb. 131, a, b, p. 90, Abb. 132.

[4] MURRAY, *Excavations in Cyprus*, p. 115, fig. 166, no. 5.

[5] MYRES, *Journ. Roy. Anthrop. Inst.*, 1903, p. 399, and Pl. xl, 6. This potsherd is now in the Ashmolean Museum numbered 09.9491. Compare also the similar arrangement of red between black lines in nos. 4, 13, 20, 21, and the allied but inverted arrangement of a black line between two red ones in no. 9. It is perhaps worth remarking that all of the above, except no. 9, which has no provenance, come from the one site, Bolus. Yet in the plate there are potsherds from many other sites, but they do not exhibit this decoration.

[6] See the examples selected for comparison with the Asia Minor group and published in Pl. xli of the above work.

[7] Another decoration in coloured bands, this time blue and edged with red or black, comes in during the XVIIIth Dynasty, and it also is often applied to pots painted white, thus imitating *qulleh* ware. See Pl. XXIII, 7, and p. 57.

[8] For references, see p. 67, note [2].

No. 58 is the neck of a bottle of fine thin W and D ware, pink in colour and turning slightly white on the outside. The lip had been pinched into four angles.

No. 59 is one of the little Syrian jugs of black polished pottery. The burnishing marks run up and down the sides, not round and round. It had contained ointment, and when first discovered the jug smelt not unlike the ointment of the pre- and proto-dynastic and pan-grave times. The ointment, moreover, had cracked the vessel, as it so often cracked the earlier receptacles.

The tomb was a pit 2·50 × 0·80 m. and 1·60 m. deep. The long axis was north and south. There were no chambers, but merely a niche on the west side about 0·60 m. wide × 0·80 m. high.

Plate XIX, no. 3. Group B 154. For the rest of the pottery see Pl. XXV. This group is only of interest for the pottery doll. The alabaster *kohl*-pot on the left, having lost its cover, had been provided with a new one of bright blue glaze. The two pots on the upper row are of the usual W and D ware, and are decorated in dark red. On Pl. XXV, pots 54, 55 were of similar ware, while nos. 52, 53 were painted red, but not polished.

Plate XX, see also Pl. XXIII. Group B 101. The most striking object is a vase in the form of a woman holding a lute. She wears only a girdle, and in the back view the hair is seen to be drawn back to a plaited pigtail, which forms the handle. The vase is made of alabaster, and that the workmanship is Egyptian is sufficiently evidenced by the treatment of the eyes and mouth. Nevertheless, the idea is foreign, and is no doubt connected with the zoomorphic art of Western Asia, and with the Greek rhytons. The Egyptian specimens have a neck with slightly concave sides rising from the head. Similar necks occur on such figure vases of Greek manufacture,[1] and with or without the moulding are also a feature of the rhytons, whether carried by an Assyrian genius[2] or found in classical lands. Figure vases are never common in Egypt, and belong almost exclusively to the pre-dynastic, XVIIIth Dynasty, and Graeco-Roman periods. In the pre-dynastic age the forms are almost invariably animal. In the Middle Kingdom the few forms are about evenly divided between human and animal shapes. In the New Kingdom the preponderance has passed heavily to the side of the human forms. At Balabish, besides this one in alabaster, we found vases decorated with a human head in B 50 and in B 36 (Pl. XXI). There is also the bird-shaped vase from B 66, already mentioned, no. 56 on Pl. XXV. For a study of the whole subject in Egypt, see Miss Murray's *Figure Vases in Egypt*.[3] A figure vase in female form is known from the island of Mochlos off the Cretan Coast.[4] This dates from E.M. III, while another, dating from L.M. III, comes from Gournia on the island of Crete itself.[5] One is also known from Gezer in Palestine, dating to the XVIIIth Dynasty.[6] Others, but in bird form, have already been mentioned from North Palestine on p. 55. The other objects of this group are a green faience bowl with a lotus in black inside, a small circular alabaster dish, and another in the shape of a fish. Both these are of the finest creamy alabaster, very thin and delicately made. The *ushabti* is of limestone, and was a ready-made object with a space for the name of the purchaser, which, however, has never been filled in. The inscription will be seen in Pl. XXIII.

[1] Cf. Birch, *Ancient Pottery*, 1873, fig. 120.

[2] See Layard, *Nineveh and its Remains*, ii, pp. 303, 304; Birch, *Ancient Pottery*, 1873, fig. 146.

[3] Published in *Historical Studies*, pp. 10–46, and Pls. xii, xxv.

[4] Seager, *Explorations in the Island of Mochlos*, figs. 32, xiii, g, and 34.

[5] Hawes, *Gournia*, x, 11.

[6] Macalister, *The Exploration of Gezer*, i, p. 306, fig. 162.

no. 6. It is a very blundered and imperfect attempt at the VIth Chapter of the Book of the Dead, which is commonly written on such figures. On the left side are faience pendants, on the right side beads of a reddish coloured resin. The finger rings are shown in the top row, of which the second from the left, representing a uraeus, should be noticed. There is also an *uzat* eye, several penannular ear-rings, and a scarab. The design on the base of this will be found on Pl. XXIII, no. 10.

On this plate are also the pots. The large one, no. 7, was painted white on the outside and was decorated with blue and red bands. Another of similar shape had turned white in patches during the firing. Both contained ashes of vegetable material, apparently largely *halfa*-grass, just like the pre-dynastic ash burials. No. 8 was red-painted and whitewashed, and two others like it were merely red-painted, as was no. 9. No. 11 is of *qulleh* ware. No. 12 belongs to a very distinct class, of which nos. 33, 34 on Pl. XXIV are further examples. There were only four general types of this class, all of them deep wide-mouthed vessels, of which the great majority approximated to nos. 12, 33. The class was made of the hard red ware, but of an exceptionally fine smooth quality, which had a tendency to turn white in the firing. It was regularly painted red all over the upper part of the vase, as indicated in the drawings. The two splashes of paint on no. 12 show that during the process of painting the pot was spinning clockwise. Thus the wheel was probably turned by the potter's right hand. The large pan, no. 13, has been supported by a cord while drying, as is still done to-day.

This group came from a large pit 4·00 × 2·30 m. and 4·00 m. deep. The long axis was north and south, and at a depth of 2·30 m. were two small chambers and two niches. The chambers were at the north and south ends, while the niches were at the east and west sides. They were all quite empty. Lower still, at the depth of 4·00 m., there was a single chamber at the south end. It was 2·40 × 2·20 m. in size and 1·00 m. high. It had been bricked up, and the objects here shown were found just inside the bricking. There had been five burials, in painted and inscribed wooden coffins, which had fallen to pieces.

Plate XXI, no. 1, see also Plate XXIV. Group B 50. The small pots in the top row are the important feature here. A specimen is drawn in outline on Pl. XXIV, no. 44. Four of them were found, and they are curious in being decorated with a human face. The face is moulded on to the shoulder of the pot, and strangely enough is turned upside down, as can be seen in the two specimens figured. The pots were of the very roughest red ware and quite small, being only about 90 mm. high. Can it be that they were intended to stand more or less perilously mouth downwards to form pieces in a game, perhaps to be bowled at? Nine-pins in the form of small vases are known in the pre-dynastic age.[1] However, we found nothing in the way of a ball.

The dish and bottle on the top row are of alabaster, and the ring with the bezel facing the spectator is of blue faience. It is drawn as no. 23 on Pl. XXIV. In the centre are the beads, &c. Discs pierced through diametrically, tubular glaze-beads in groups of threes, and two little glazed steatite double frog groups. For these latter, see nos. 21, 22, Pl. XXIV. No. 20 of the same plate is the drawing of the scarab seen at the end of the string. In the lower row there are four penannular ear-rings, a heart scarab of slate, which bears a very blundered attempt at the Chapter of the Heart from the Book of the Dead. It is copied on Pl. XXIV, no. 19. The three pilgrim-flasks are figured in outline as nos. 46, 47 on Pl. XXIV, where also the flattened side view is shown. All three are made of thin red W and D ware, which has

[1] P., *N.B.*, Pl. vii, 1, p. 35.

turned green on the outside, with a patch of red showing occasionally. They have a beautiful smooth silky surface, not unlike that of some of the pre- and proto-dynastic cylinder jars in texture. One of the smaller ones still had remains of ointment inside, and was cracked, as ointment vessels so often are. A great quantity of pottery came to light, for which see Pl. XXIV, mostly of the usual style. One example of no. 25 was whitewashed, as was the rim of no. 36. The rims of the other two examples of no. 25 were painted red. Nos. 33, 34 have already been treated on p. 57. There were four specimens of no. 33. Nos. 48, 49, 50 were all of the ordinary hard brown ware of the period and unpainted, but while no. 48 was very rough, nos. 49, 50 were finely made and thin. The common type of mouth in these last two, without a neck or even a rim, although the sides incurve as if to receive one, is as ancient as the pre-dynastic period.[1] In this group there were three examples of no. 50. No. 51 is of *gulleh* ware.

The tomb consisted of a shaft 2·60 × 2·00 m. and 4·30 m. deep. It contained two storeys of chambers at the N. and S. ends of the shaft. Those at a depth of 3·20 m. had been emptied. At a depth of 4·30 m., at the S. end, was a small niche which had been walled up. It had contained a burial in a wooden painted anthropomorphic coffin. No objects were found here. Opposite it, at the N. end, was a large chamber 5·00 × 2·60 m. and 1·20 m. high. It had been walled up, and had contained fifteen interments in painted wood and stucco coffins similar to the previous one. It was from here that the objects were collected.

Plate XXI, no. 2, see also Plate XXV. Group B 36. The central piece shows the upper part of a female figure vase. It is made of the ordinary hard red clay of the period. It never possessed more than a single handle. With it are four strange pottery covers, having animals sprawling over them. As they are four in number, and are connected with animals, one would suppose them to have come from canopic jars, but the animals do not agree with the heads usually depicted on those covers. The pottery figures below these are very strange and of the roughest make, having been merely pressed into a mould and smoothed off at the back. There were thirteen figures found, including two *reises* or foremen, with their projecting kilts, as is seen on the figure in the middle. At first sight one would take them to be *ushabtis*, but they are very different from the usual ones. To begin with they are not human-headed, as *ushabtis* usually are, but seem to be ape- or dog-headed. Further, they are not mummiform as these figures should be, but their legs are clearly marked. Again, they carry no agricultural implements, nor are their arms crossed on the breast, as they should be, but hang down at the sides. Thus in no detail do they correspond to the usual *ushabti* figures, but it is difficult to believe that they do not in some way represent them, especially as among their number is found the *reis*, just as he is with the regular *ushabtis*. The tomb was very much disturbed, as besides these there were genuine *ushabtis* of two different sorts, all very rough and bad. There is nothing to remark in the pottery on Pl. XXV, except that there were two specimens of the rather unusual *situla*, no. 62. No. 63 has a flange moulded on the inside of the rim to take a cover. This arrangement dates back to the pre-dynastic age and is no doubt copied from basket-work.

The grave was a shaft lined at the top with bricks. It measured 2·50 × 1·00 m. and was 3·00 m. deep. It had chambers at the bottom, and its axis ran north and south.

Plate XXII, no. 1, see also Plate XXV. Group B 90. This contained a plaque about 150 mm. long, of a very poor quality blue glaze.

[1] See P., *N.B.*, Pl. xxi, 75 a, xxii, 27.

A side view of it is numbered 67 on Pl. XXV, where it will be seen to be grooved. This groove runs round all four edges. Both surfaces are slightly convex, and both are glazed. Though this is hardly suitable for a tile for inlaying on a wall, yet the object can hardly be anything else. Thus the grooves on the edges would be for the purpose of fixing in the cement. If so, this system is quite different from that of the early period of the Ist and IIIrd Dynasties, where the central part of the back projects, is slightly undercut, and is bored through to receive a wire.[1] It is also different from the usual New Kingdom method, where the plaques are flat at the back without projections, grooves, or other means of fastening.[2] Inlaying with tiles was not uncommon in the New Kingdom. Beside it are a pair of small toggles (?) of ivory. Though only one is bored at each end, both have a deep notch or open hole at one end. It may only be that in the boring a piece broke out. Only these two were found. Similar objects, but bored at both ends, are known in the VIth Dynasty;[3] and a number of others of the intermediate period between the XIIth and XVIIIth Dynasties, from grave Y 16 of Diospolis Parva, are now in the bead-cases of the Edwards Collection. Another, but larger, of the C-group period, is reported from Nubia.[4] The shells are the freshwater *Viripara unicolor*, except a single specimen of *Nerita sc. polita*.[5] These were both pan-grave types, as are the little white and blue beads of the two strings in the top row, the melon beads just below the shells and in the bottom row, and the black glaze spheroid beads. The broken alabaster *kohl*-pot with its badly fitting cover, no. 64, Pl. XXV, might also be of this age, but the pottery was more likely to be of New Kingdom date than pan-grave. It is drawn in outline as nos. 65, 66, on Pl. XXV. The other objects, the model *kohl*-pots of mud, the glazed tubular and carinated beads, and the little blue glaze scarabs, are however New Kingdom. The small rings at the top of the photograph are of lead.

The grave was a shaft 2·20 × 1·00 m. and 2·00 m. deep. The long axis ran north and south, and on the western side there was a niche. Thus it might either be a long pan-grave, such as no. B 188, or a chamberless New Kingdom grave. It was found among the New Kingdom graves, and so is probably of this date; but the group is perhaps a mixed lot.

Plate XXII, no. 2, see also Plate XXV. Group B 157. This group shows a bronze implement of a type generally taken to be a razor. In B 81 another of similar shape was found, but this had had a handle projecting from the side. With it, in the northern chamber, were found the two alabaster dishes. From the southern chamber came the scarab of a dark greyish blue glaze, and the alabaster ear-stud. From this chamber also came some fine blue and a few small red jasper disc beads, also a little gold foil. The back of the scarab is shown in Pl. XXV, no. 68. On this plate is also shown the pottery, nos. 69 to 80; and to this should be added the small

[1] Petrie, *Abydos*, ii, Pl. viii, 181, 182; Borchardt, *Ä.Z.*, xxx, Pl. 1.

[2] As for instance in the well-known tiles of Rameses III from Tell el Yahudiyeh; Brugsch, *Rec. de Trav.*, viii, Pl. i, figs. 1, 2. Small tiles for inlay are not at all uncommon in the New Kingdom in the time of Akhenaton (Petrie, *Tell el Amarna*, Pls. vi, xviii–xx), Seti I (Petrie, *Palace of Apries*, Pl. xxii, no. 3, p. 15), and Merenptah (*op. cit.*, Pl. xxii, nos. 1, 2, and p. 15). At this time inlay of alabaster is used, see Pl. xxii, no. 14, and p. 15. Another tile of this king, or of Seti II, comes from Khata'neh, and others of Seti II (Griffith, *Tell el Yahudiyeh*, p. 57, Pl. xix, fig. 28). Of Rameses III, besides those from Tell el Yahudiyeh, others are known from Medinet Habu (Daressy, *Annales du Service*, xi, pp. 49 ff. Pls. i to iv). To the tiles of early times may be added those named by Maspero as bearing the cartouche of Pepi I (*Les Origines*, 243, note 1).

[3] P., *C.A.*, i, Pl. vii, E 45.

[4] *A.S.N.*, 1908–09, Pl. 37, b, no. 19.

[5] We are indebted to the authorities of the Natural History Museum of South Kensington for the names.

rough pot with rudimentary handles which has been photographed. This group produced a remarkable number and variety of the small tubular pots. Of no. 69, which was red polished, there were twenty-one specimens. Of no. 73, which was red painted, there were three specimens, and four of no. 74, all of which were made of a coarse *gulleh* ware. Two vases, nos. 71, 72, were red-polished with a black-painted rim, which fashion does not come in until the XVIIIth Dynasty. The idea may have been derived from the black-topped ware of the preceding age, that of the pan-graves. Nos. 77, 78 were made of W and D ware, the second being decorated with purplish black and red lines, while the first was red-polished and decorated with black lines. As so often in these vases, no. 78 was decorated on the brim with groups of lines. No. 79 was made of a softish brown clay and was polished brown. It has the base ring or hollow foot so common to these vases.

CHAPTER IX.

FOREIGN POTTERY OF THE NEW KINGDOM.

The New Kingdom Cemetery yielded an unusually large proportion of foreign pottery of various types. Egyptologists as a whole have adopted a somewhat uncritical attitude in dealing with these un-Egyptian products, and have shown too great a readiness to assign certain types of vase to the Ægean, to Cyprus, or to Syria, without even asking whether such types occur in these regions, still less whether they are native there.

Difficulties and misunderstandings could easily be cleared away if excavators who find foreign vases in Egypt would make a careful examination and record of the nature of the clay and even the smallest details of technique, and if, in making comparisons with other countries, they would keep the question of date continually before their eyes. If this were done, we should less often be confronted with the ludicrous spectacle of an Egyptian archaeologist and a Palestinian each explaining one and the same type of vase found in his area as an import from that of the other.

With these considerations in mind we have attempted the following full analysis of the foreign forms found at Balabish.

1. The *bilbils*. Pl. XXV, no. 79 is made of a soft reddish brown clay and is burnished brown on the outside. This is one of the regular materials for *bilbils* in Egypt, though still more frequently they are made of a blackish grey ware, thin, hard and brittle, and breaking in a flaky manner. A specimen made of this ware was found in B 173. These vessels are burnished black and often have a metallic lustre. There is yet a third kind of clay used for this type of vase, which is thicker and pinker, and is coloured a blackish brown. It is then ornamented with stripes in white. Such a vase was found in B 38.[1] In broken *bilbils* the neck is seen to have been made in a separate piece, and to have been thrust into the semi-dry clay of the body. No traces of ointment were observed in any of these vases, nor, we believe, is it ever found in them. Vases of this type do not belong to the Aegean, Asia Minor, or North Syria, nor have they been found in North Palestine at Tell el Mutesellim or Ta'annek, nor yet at Jericho in South-East Palestine, though they are found in considerable numbers at Lachish[2] and Gezer[3] in South-West Palestine. Vases of a similar class are found in Cyprus during the Bronze Age.[4] However, the types that are common here are rare in Egypt, and *vice versâ* the high-footed type which is normal

[1] A good example can be seen in P., *I.K.G.*, Pl. xiii, 31.

[2] Petrie, *Tell el Hesy*, Pls. vii, 115, viii, 138, 144.

[3] Macalister, *The Excavation of Gezer*, iii, Pls. lxvii, fig. 1, lxxiv, 6, 7, &c.

[4] Myres and Richter, *Catalogue of the Cyprus Museum*, Pl. ii, nos. 253, 255, 271, 277, &c. Myres, *Handbook of the Cesnola Collection*, class C, pp. 39, 40. The technique of a spiral moulding which is sometimes seen on these vessels (*Catalogue*, Pl. ii, no. 253; *Handbook*, p. 39, nos. 339, 341) bears some affinity to that of Troy, where, however, it is generally used in connection with the handles (H. Schmidt, *Schliemann's Sammlung*, fig. 433, p. 21, fig. 564, p. 29, fig. 1044, p. 48, fig. 1919, p. 86. A spiral merely in relief, without connection with the handle, is shown in fig. 832, p. 41, fig. 1370, p. 59. The Trojan spirals are early, as they belong to the first class of pottery from the second to the fifth cities.

in Egypt[1] is not figured from Cyprus. The only type which is found equally in both lands seems to be the scarce double vase.[2] Yet in this island the technique of making parts separately, and thrusting them into the partly dried body, is observed in other classes of vessels which also have a neck and handle.

This class is generally thought to be native to the Syrian coastland, and Myres has suggested that some of it may have been made in Cyprus.[3]

2. The spindle-shaped bottle, Pl. XXV, no. 81, though well known, is always a rare type. It is made of a very hard, pure, brownish red clay, and is polished a light yellow-red, no doubt acquired by means of haematite. Bottles something like this shape and painted red are brought by the Syrians in the Menkheperresenb fresco,[4] and a similar type is brought by the Keftiuans in that of Rekhmire.[4] There are several from Bronze Age Cyprus,[5] but they are probably not of Cypriote manufacture.[6] One now in the Ashmolean Museum is said to have been found on the island of Melos, but none are figured from Phylakopi in this island. A single one is figured among L.M. I pottery from Gournia in Crete.[7] None come from Tell el Mutesellim or Ta'annek in North Palestine, or from Jericho, but a single base of one is figured from Lachish in South-East Palestine,[8] and another single specimen is recorded from Gezer.[9] This last specimen is included among the foreign pottery, and is described as "recognizably of Egyptian origin"! Beyond these few isolated specimens the bottle does not seem to be known outside Egypt, where a single specimen or so is always liable to be found on the site of the middle or late XVIIIth Dynasty. The potter's mark figured above it in the plate was made in the wet clay of the base. It is a variety of the Cypriote character for the syllable *to*,[10] and is found again as a potter's mark in Melos.[11] It is not found among the few potters' marks figured from the Cesnola Collection,[12] but is found three times from Kahun[13] in the Fayum, though here they are not potters' marks, but are scratched on the vessels.

3. The pilgrim or lentoid flasks. Pl. XXV, no. 82 is made of a pink W and D ware, and the circles of the decorated specimen from group B 17 are very roughly put on in dull red paint. The other example, B 104, was made of the same clay, but was plain. They may be Egyptian imitations of the foreign type. The pilgrim-flask is not Hittite,[14] and in North Palestine it is not figured from Ta'annek until nearly Greek times, and then only once and in a curious form.[15] It is found twice, however, at the neighbouring Tell el Mutesellim,[16] in each case decorated in an unusual style. Outside Egypt it is mostly

[1] As for instance P., *H.I.C.*, Pl. xii c, figs. 23, 24.

[2] P., *H.I.C.*, Pl. xii B, right-hand bottom corner, or P., *L.G.M.*, Pl. xxi. Compare these with Myres and Richter, *Catalogue of the Cyprus Museum*, Pl. ii, 252; Myres, *Handbook of the Cesnola Collection*, pp. 40, 358; Murray, *Excavations in Cyprus*, p. 15, fig. 71, no. 953.

[3] Myres, *op. cit.*, p. 37.

[4] *L.A.A.A.*, 1913, Pl. ix, 13, Pl. xi, 65, x, 40.

[5] Murray, *op. cit.*, figs. 66, 74. Myres and Richter, *op. cit.*, no. 300, p. 47 and Pl. ii. Myres, *op. cit.*, nos. 369 to 375, p. 11, where they are said to be probably not of Cypriote manufacture.

[6] The curious vessel, no. 1108, p. 40, fig. 68, Murray, *op. cit.*, which is like an arm holding a cup, is burnished with the same rather unusual yellow-red colour that is usual on the spindle-shaped bottles. It is now in the British Museum.

[7] Hawes, *Gournia*, Pl. viii, 25.

[8] Petrie, *Tell el Hesy*, Pl. vii, 121, but it is included with light brown *porous* pottery, p. 14.

[9] Macalister, *op. cit.*, ii, p. 177, fig. 338.

[10] Taylor, *Alphabet*, ii, p. 123.

[11] Edgar and others, *Phylakopi*, p. 179, fig. F, 13.

[12] Myres, *op. cit.*, p. 41.

[13] P., *I.K.G.*, Pl. xv, col. 5 and p. 11.

[14] Cf. Woolley, *L.A.A.A.*, vi, Pls. xix, xxvi.

[15] Sellin, *Tell Ta'annek*, Pl. v, fig. a.

[16] Schumacher, *Tell el Mutesellim*, p. 70, fig. 90 i, p. 81 and p. 82, fig. 111.

known from South Palestine, chiefly at Gezer and Lachish, but also at Jericho;[1] it is also known from Cyprus. It does not seem to be native to any of these countries, and appears in each of them about the same time, but later in Cyprus than in the others. For the pilgrim-flask proper, of a flat shape with two small handles, hardly[2] seems to enter the island until some time after it is found in Egypt and Palestine, i.e. not until the Early Iron Age, from 1200 B.C. onwards.[3] It is found in Egypt in the XVIIIth Dynasty, and at Gezer it is introduced in the second Semitic period,[4] which lasts until the end of the same dynasty. At Gezer it becomes more common later,[5] while at Lachish it does not occur until the later period, i.e. from 900 to 700 B.C.[6] Thus, occurring as it does in Egypt just at the period of her greatest expansion in the XVIIIth and XIXth Dynasties, this foreign type is known there earlier than in Cyprus, and at about the same time as it first appears in South Palestine. Here the resemblance ceases, for such vessels of foreign manufacture are not found at a later date in Egypt, whereas it is precisely at the later period that they reach their zenith in Palestine and Cyprus. A flattened form, but of a very different vessel, is known in Cyprus still earlier in the Middle Bronze Age,[7] while the true flattened circular shape is known in the next period or Late Bronze Age, about 1500 to 1200 B.C. It is, however, not given to the short-necked pilgrim-flask with two small handles, but to a long-necked bottle with a single large handle springing from the back.[8] This, however, cannot be considered the forerunner of the pilgrim-flask, as it is found at this same period in Egypt, i.e. the XVIIIth Dynasty,[9] at which time the fully developed pilgrim-flask is also common in this country. Thus the two shapes were in existence at the same time and entered Egypt simultaneously, though in Cyprus the one is later in its appearance than the other. Further, both of the clays of which the long-necked bottles are made are probably not Cypriote but foreign, perhaps Syrian.[8] Hence the form did not originate in Cyprus.

The shape is not native to the Ægean and Greek mainland, where, as in Cyprus, it is of late occurrence. We only know of a single specimen from Mycenae, which may well be of sub-Mycenaean date, and is decorated in the style of the Cypriote Early Iron Age.[10]

From Troy, however, come three vessels, the description of which reads as if they were true pilgrim-flasks.[11] They are very early, as they come from the second to the fifth settlements, and, being thus of pre-Mycenaean date, are therefore earlier than the pilgrim-flasks from any of the above-mentioned places. Also from Troy, and contemporary with these, comes another form, which stands half-way between the true double-handled pilgrim-flask and the single-handled long-necked Cypriote bottle.[12] This flask is lentoid in shape, as are both the other forms. It has a single handle, as have the Cypriote vessels, springing not from the back as

[1] Sellin and Watzinger, *Jericho*, Bl. 29, c, 23, 39, E. 4b.

[2] We only find one instance of a true pilgrim-flask in the Bronze Age in Cyprus, see Murray, *op. cit.*, p. 10, fig. 68, no. 1111.

[3] Myres and Richter, *op. cit.*, pp. 21, 66, Class B, cf. Myres, *op. cit.*, p. 70, nos. 541 to 546 and p. 54.

[4] In the first Semitic period, which ended with the XIIth Dynasty, small vessels with little handles at the neck are found at Gezer. They, however, are not lentoid in shape, but globular. Macalister, *op. cit.*, ii, 142, q, iii, Pl. cxliii, figs. 3–8.

[5] Macalister, *op. cit.*, ii, 162 (j), 199 (j).

[6] Petrie, *Tell el Hesy*, p. 46.

[7] Myres, *op. cit.*, p. 24, nos. 159, 160.

[8] Myres, *op. cit.*, figs. 328, 377.

[9] As for instance, P., *H.I.C.*, Pl. xii, c, 24.

[10] Ἐφ. Ἀρχ., 1891, Pl. iii, 1; cf. for ornamentation Myres, *op. cit.*, p. 81, figs. 647, 649, &c.

[11] H. Schmidt, *Schliemann's Sammlung*, nos. 630–632 p. 34.

[12] *Op. cit.*, nos. 634 (which has a narrow neck), 635, 636.

in these, but from the side, as in the pilgrim-flasks. The neck is long, as in the Cypriote bottles, but not narrow, and is cut out behind into a spout.

In Palestine the pilgrim-flask takes on a curious form, for it acquires a spoon-shaped mouth.[1] This type, though very rare, is said to be not unknown in Cyprus.[2]

One pilgrim-flask is figured as being of Assyrian origin,[3] and hence is probably much later than the Egyptian specimens, and contemporary with those of Cyprus, Lachish, and the later period at Gezer. Thus the form suddenly extends widely over the eastern Levant, and all that can be said of its place of origin is that it is probably not Cyprus, where it is found later than in Egypt or Gezer. Possibly the fact of a bottle of this shape being made of the rare metal tin[4] will give a clue as to the home of the type.

The flattened shape and small handles on the shoulder of the pilgrim-flasks are as old as the Middle Pre-dynastic Age.[5] This age, like the XVIIIth Dynasty, shows many connections with Asia, of which it will be sufficient to mention the use of lapis-lazuli, emery, silver, and the wavy handles of one class of jar. It is thus likely that this primitive pilgrim-flask is one of them. The pilgrim-flask is copied in blue faience in the New Kingdom, when wreaths are added over the shoulders.[6] From these Egyptian copies are descended the New Year vases of the XXVIth Dynasty, which are also made in blue faience and have the wreath as a prominent decoration. By this time the little handles have degenerated into a pair of apes, one on either side of the neck,[7] but occasionally the last stages of the handles can be observed.[8] The *bilbils* sometimes take this flattened form also,[9] hence no doubt are allied to the Cypriote red single-handled vases of lentoid shape of this date to which reference has been made above. The pilgrim-flask is sometimes made in a ring form.[10]

Plate XXV, no. 83 is made of a pure hard buff clay, and the walls are very thin, being only 4 mm. thick. The material is entirely un-Egyptian. The neck has been moulded up out of the body itself, and has not been made separately and thrust in as in nos. 46, 79, 86. It is decorated with lustrous black paint, probably haematite, which has a tendency to turn red in places. As will be seen from the plate, instead of the vase being of a flattened section like the others, its side view is actually a little broader than the front view. It thus corresponds best perhaps to the globular and barrel-shaped jugs of the Early Iron Age in Cyprus. In decoration and general shape it would have been nearest to the globular bottles of the Late Bronze Age, were it not that these have a

[1] Macalister, *op. cit.*, iii, Pls. lxv, 25, lxxxvii, 8; cf. Pl. lxxxviii, 6, and Sellin and Watzinger, *Jericho*, Bl. 39, e, 4, b, and perhaps Schumacher, *Tell el Mutesellim*, p. 82, fig. 111. In most of these spoon-mouthed flasks the handles have been turned at right angles to the neck, no doubt to accommodate the broad mouth. For the addition of a vessel at the mouth of a vase in which to receive the liquid, compare the red-polished vessel from Cyprus, no. 1108, already referred to in note 62, p. 6.

[2] Myres, quoted by Macalister in *Gezer*, ii, p. 179, k.

[3] Birch, *Ancient Pottery*, fig. 77.

[4] Ayrton and others, *Abydos*, iii, Pl. xvii, 20, p. 50.

[5] P., *N.B.*, Pl. xii, 72, and also 71, now in the Ashmolean Museum, numbered 1895, 213; MacIver and Mace, *El Amrah and Abydos*, Pl. xvi, fig. 9; Quibell, *Hierakonpolis*, ii, Pl. xxx, figs. 3, 4, where the handles are bored in the opposite direction. The wide neck and very small handles somewhat removed from it are seen again in the New Kingdom, Petrie, *Qurneh*, Pl. xlii, fig. 942, cf. fig. 757, p. 13; or the wide neck in conjunction with the more usual handles at this period, Engelbach, *Riqqeh and Memphis VI*, Pl. xiv, 8, 40. For the flattened shape without the little handles, see P., *L.G.M.*, Pl. xi, 32, a–f.

[6] P., *I.K.G.*, Pl. xvii, 9, p. 17, dated to Amenhotep III; Pl. xviii, 61, p. 18, dated to Rameses II; Pl. xix, 14, p. 18, dated to Seti II.

[7] P., *H.I.C.*, Pl. xxi.

[8] *Op. cit.*, Pl. xxi, 1, 4.

[9] *Op. cit.*, Pl. xii c, 24.

[10] Garstang, *El Arabah*, Pl. xxi, e 158, 233; MacIver and Mace, *El Amrah and Abydos*, Pl. xliv, d 16 b; cf. l, d 17.

base-ring added.[1] This would seem to be a development from the more simple type of which our vase is a specimen. Thus, like the true pilgrim-flask of flattened form, it does not seem to have entered Cyprus until an age later than that at which it was known in other countries.

In B 38 we found the neck and shoulders of a similar vase, but of a circular not flattened form.[2] It was made of the same hard, pure, buff clay, but in the outer portions of the walls it had turned slightly redder. It thus forms a connecting link between the buff clay of no. 83 and the similar but red clay of the spindle-shaped bottle no. 81. In this case the neck has been moulded up out of the body itself, and has not been made separately and thrust into the semi-dry clay of the body. Unlike no. 83 this vase was decorated with bands running round horizontally. The bands are in a dully polished red paint, and just enough remains to show that they consisted of narrow lines between broad ones, a decoration similar to that of no. 84.

Pl. XXIII, nos. 3, 4, are made of a red W and D ware fairly thin, and are polished red on the outside. No. 3 still contained remains of ointment. We were able to see that the neck of one example of no. 46 had been thrust through the partly dry clay of the body.

4. False-necked amphorae, stirrup-handled vases or Bügelkannen, Pl. XXV, 84–87. The clays of nos. 84, 85, 86 are all very similar, a smooth buff ware very like that of nos. 81, 83. They are, however, not nearly so hard or pure as the latter, resulting in a pottery of a rather more porous and open texture. Their clays are all foreign to Egyptian pottery. Apart from Egypt, this class is practically not known outside of the Ægean area and Cyprus. Only a few are figured from Gezer in South Palestine,[3] and none from Lachish, Jericho, Tel el Mutesellim or Ta'annek. The tall form, which is common in the Ægean and in Cyprus, practically never occurs in Egypt.[4] None of our examples had floral or other decorations on the flat surface above the shoulder. In Minoan lands, except Cyprus, false-necked amphorae undecorated in this way are very much the exception. In connection with these vases mention should be made of the well-known representations in the Tomb of Rameses III.[5] Here the bands are filled, not with a number of finer bands as usual, but with cross-hatched lines, and zig-zag lines and spots. The latter of these is generally considered to be a Syrianizing pattern.[6] The various decorations, other than bands, which are put on these vessels in the Ægean, as for instance the octopus,[7] are unknown in Egypt.

[1] See Myres, *op. cit.*, p. 49, figs. 145, 446. This latter type, with the base-ring added, though still far from common there, occurs in the Aegean area more than does the true pilgrim-flask. A single specimen is recorded from Knossos (Evans, *Prehistoric Tombs of Knossos* (Archaeologia, lix), p. 123, fig. 117, no. 76, E). Another is figured from Crete or Cyprus (Furtwaengler and Loeschke, *Mykenische Vasen*, Pl. xiv, 92), and yet another from Boeotia (*op. cit.*, Pl. xx, fig. 149). A similar form, but with one handle only, is figured as no. 145 on the same plate.

[2] It must have been a bottle like Murray, *op. cit.*, p. 31, fig. 62, no. 1222, or MacIver and Woolley, *Buhen*, Pl. 18, 8, xliii.

[3] Macalister, *op. cit.*, iii, Pls. lxx, 14, lxxi, 17, 25, lxxxvii, 18.

[4] The only published specimen we know is Engelbach, *Riqqeh and Memphis VI*, Pl. xxii, 2, whereas the squat and globular forms are common, as for instance fig. 3 of the same plate; P., *K.G.H.*, Pl. xxviii, 1, 7; P., *I.K.G.*, Pls. xvii, 3, 28, xix, 12, 27, xx, 7, &c.

[5] Rosellini, *Mon. Civ.*, Pl. lix, 3.

[6] It is, however, not far removed from such a pattern as the Cretan represented in Hawes, *Gournia*, x, 21, though this is not on a false-necked amphora. Neither is it far from the bands of zig-zag lines on no. 162; Furtwaengler and Loeschke, *op. cit.*, xxii. A cross-hatching within bands appears in Murray, *op. cit.*, fig. 68, no. 1097, fig. 69, no. 1138, fig. 70, no. 1277. All of these last, however, are not false-necked amphorae, but three-handled piriform vases.

[7] For instance Hawes, *Gournia*, x, 2; Furtwaengler and Loeschke, *op. cit.*, Pls. iv, 24, A.B., 27, A.B., xi, 69, xiv, 84–87, &c.

The Minoans in the Senmut fresco do not bring any vases of this type, nor do the Syrians or Keftiuans, unless two vases there depicted can be supposed to represent abnormally tall examples.[1]

No. 84 is painted in lustrous black colour with a tendency to turn red. It had five concentric circles under the base.

No. 85 was decorated with dull red paint, and had three concentric circles under the base.

No. 86 was also decorated with dull red paint, but had no circles under the base. The spout had been thrust through the semi-dry clay as in the *bilbils* (no. 79), and as in one of the pilgrim-flasks, no. 46. No. 86 contained a thick blackish brown sediment, coating the whole of the inside, presumably the remains of a liquid ointment or oil.

No. 87 was painted with dull red bands, and had no circles under the base. As the clay differed from that of the rest, and approximated to the Egyptian W and D ware, it may be that this is an Egyptian imitation of the foreign class. The Egyptians were certainly accustomed to imitate such foreign vases, for a false-necked amphora in green glaze is actually reported from the old Bulaq Museum,[2] and others in the same material, and with Egyptian decorations, are published,[3] which are evidently designed after some such foreign type. Mention has already been made of the Egyptian imitations of pilgrim-flasks in glaze. Vase no. 87 contained scented ointment similar to that of the pre- and proto-dynastic ages and of the pan-graves.

5. Plate XXV, no. 59 is of black polished pottery. It contained ointment with a sweet scent similar to that of the pre- and proto-dynastic ages and of the pan-graves. This had cracked the jug as it so often does. Small jugs entirely similar are known during the Hyksos Period,[4] and occasionally from the Middle Kingdom.[5] This class is foreign to Egypt, yet at present it is apparently not known outside of Egypt.[6] Though often supposed to be Palestinian, none whatever is figured from Lachish, Gezer, or Jericho in South Palestine, nor yet from Tell el Mutesellim or Ta'annek in North Palestine. However, it would not be out of place among the Palestinian pottery, where a large percentage of red-brown polished jugs are known. These have small necks and handles, but the body is not so globular as ours, as it is shaped like an inverted cone.

The whole of the foregoing group is quite un-Egyptian in all its shapes, and half of the vases at any rate, nos. 79, 81, 83, 84, 85, 86, are importations, clearly made of foreign clay. The others might be Egyptian imitations of the foreign types. There are points of connection between the various members of the group, in that the clay of the pilgrim-flask no. 83 is identical with that of a broken fragment of a false-necked amphora, painted with lustrous blackish-red colour, which was also found at Balabish, but is not figured here. The clay of both is the same as the clay of the globular vase from B 38, to which we have recently referred (on p. 65), but in B 38 the external portion of the walls has turned pinker. All these clays are similar in texture to the redder clay of the spindle-shaped bottle no. 81. The difference in

[1] *L.A.A.A.*, vi, Pls. xiii, 81, xiv, 9, pp. 56, 57.

[2] Griffith, *Tell el Yahudiyeh*, p. 46, no. 15.

[3] P., *I.K.G.*, Pl. xx, 1.

[4] P., *H.I.C.*, Pl. viii B, figs. 103, 106, 107, 108.

[5] Ashmolean Museum no. E 2001 is from Beni Hasan, and therefore probably of XIIth Dynasty date; and in the same museum is another from Haragch, accompanied by its label from the British School of Archaeology, which states it to date to the XIIIth Dynasty (?).

[6] None are figured from the Ægean in Furtwaengler and Loeschke, *op. cit.*, or in Hawes, *Gournia*, or in Edgar and others, *Phylakopi*. Nor yet is it figured from Cyprus, either in Myres and Richter, *op. cit.*, or in Myres, *op. cit.*, or in Murray, *op. cit.* Neither is any figured from North Syria in *L.A.A.A.*, vi, Pls. xix, xxii, xxiii, xxv, xxvi.

colour might be accounted for by supposing a more complete firing in the case of the latter, as the change from buff to red had begun to take place in the vase from B 38. Moreover, all these clays, though different, are not very unlike those of the false-necked amphorae nos. 84, 85, 86.

Again the base-ring (hollow foot) is very common among those which have bases, for all the *bilbils* have either it, like no. 79, or else the allied form of a trumpet-shaped foot, which is also hollow. No. 81 is made with a base-ring, as are the false-necked amphorae nos. 84 to 87. Only the black-polished jug, no. 59, stands out. The base-ring, hollow as it is underneath, is found again very commonly in the button-foot of the black ware jugs with punctured patterns filled in with white (Tell el Yahudiyeh ware), which are found in Egypt from the XIIIth Dynasty on to Hyksos times. This ware also is of foreign origin, and is usually considered to be Syrian, though similar vases from Gezer are said to be imported from Egypt![1] On Egyptian-made vessels we believe the base-ring to be practically confined to a portion of that class of New Kingdom pottery which is Syrianizing both in shape and decoration.[2] Besides being found on Syrianizing pottery it is found also on a bronze jug, which is a Syrian type.[3] This hollowing of the base can hardly be separated from the narrow high trumpet-shaped foot such as the *bilbils* more commonly have,[4] for this also is hollow. This trumpet-foot is generally quite inadequate as a steady base for the vase it supports, as is the button-foot of the black punctured ware, or that of such vases as nos. 81, 86, 87. It further resembles these bases in being found in Egypt on other objects of a Syrianizing nature, that is to say on the alabaster, blue-frit, &c., stand-vases of a globular shape with a high wide neck and strong rim,[5] a type not known in Egypt until the XVIIIth Dynasty, and figured as being brought into

[1] Macalister, *op. cit.*, ii, pp. 156, 160, 161, Pl. cliii, figs. 8, 9, 10.

[2] P., *C.A.* iii, Pl. v, 33. P., *G.R.*, Pl. xxvii, F, 158, 159. Compare their wide necks and strong rims surmounting a more or less globular body with Woolley, *L.A.A.A.*, vi, Pl. xxii, no. 1, which an inspection of the original shows to have the ring-base. The shape of the vase no. 62 of *El Amrah and Abydos*, Pl. lv, is actually closer, but unfortunately the hollowness of the foot, which will probably be there, is not indicated. Specimens considerably closer to the Egyptian vases can be found among the North Syrian pottery that is still unpublished. Apart from these Syrianizing forms, a base-ring is quite unusual and extremely rare on Egyptian vessels, but still is not absolutely unknown. See de Morgan, *Tombeau Royale de Negadah*, p. 184, fig. 664; *Medum*, Pl. xxx, 17; *Mahâsna and Bêt Khallâf*, Pl. xxxv, 12; Borchardt, *Grabdenkmal des Königs Saḥu-reʿ*, p. 115, fig. 118, two cylinder vases, p. 116, fig. 153, one bowl, p. 117, fig. 160; P., *K.G.H.*, Pl. xvii, 7; *Abydos*, iii, Pl. xlvii, 65. This completes the list of published specimens known to us, but we know yet another on such a vase as *Riqqeh and Memphis VI*, Pl. xxxiii, no. 67, n. Hence its liability to occur among such bases as there are on the Syrianizing pottery of Egypt is remarkable. The habitual use of a base-ring is not found in Cyprus until the Late Bronze Age, beginning about the rise of the New Kingdom in Egypt, when the custom comes in, notably with that class of pottery which includes the *bilbils*. Myres, *op. cit.*, p. 36. A ring-base is visible on the only bowl of the first or eneolithic period at Susa which exhibits its base (de Morgan, *Délégation en Perse*, xiii, Pl. xi, 7). Hence probably the numerous other bases on the pottery of this period are of ring form also. The wide neck, strong rim, and more or less globular body referred to at the beginning of this note continually occur in North Syrian pottery in one form or another; cf. Woolley, *L.A.A.A.*, vi, Pls. xxii, 10, 11, xxiii, 10, 15, and on many other specimens not yet published.

[3] MacIver and Mace, *El Amrah and Abydos*, Pl. lii, tomb D 35. Its component elements and globular body, a long wide neck with a strong moulding at the rim, are the same as those of the Syrian vases discussed in note [1], p. 68. The discovery of the base-ring worked in the bottom of a type of vessel that is so often mounted on a hollow stand is of importance in connecting the two. The original is now in the Bristol Museum, where it was examined.

[4] As for example P., *L.G.M.*, Pl. xxi, 7, or P., *H.H.C.*, Pl. xii c, 23, 24, 24.

[5] As for instance MacIver and Woolley, *Buhen*, Pl. 66, fig. 10297, or P., *I.K.G.*, Pl. xxvii, 1, 2, 3, 5, 6, from the Maket tomb.

Egypt by the Syrians.[1] The same feature is seen on the lotus vases of this period, whether of faience[2] or of alabaster, such as the strange specimens from Sinai now in the Ashmolean Museum. Although it might have been thought that these would have been purely Egyptian, yet besides having the hollowed trumpet-foot, they are also shown as being brought by the Syrians and Keftiuans.[3] We content ourselves with quoting these classes, actual examples of which have been found, but a glance at the tribute scenes will emphasize the extent to which such a foot or stand was used for every kind of vase by the Syrians. The Syrianizing globular vases with the wide neck, and copies of the Syrian *bilbils* as well, are also made of glass,[4] a substance not known in Egypt before the XVIIIth Dynasty, when so many Syrian influences were at work. Both the hollow base-ring and the hollow trumpet-foot are actually found very commonly on the pottery of this age and earlier from North Syria,[5] also in Palestine,[6] where they continue into Jewish times.[7] Both the base-ring, the button-foot, and the high trumpet-foot, all of them inadequate to their vases, are quite common in the first division of the pre-Mycenaean settlements at Troy. They are therefore much earlier than the "Syrian" or Syrianizing vessels of the Egyptian New Kingdom.[8] Thus the base-ring and the hollow trumpet-foot, often of inadequate dimensions, are closely connected with the vase forms of Syria and of early Troy.

Apart from these Syrianizing examples the hollow trumpet-foot is very rare in Egypt,[9] and

[1] In Rekhmire, see Virey, *Mems. Miss. Franc.*, v, 1, Pl. vii, second row of deposited presents; cf. also the vase in Hall, *Ancient History of the Near East*, Pl. xv. 1, bottom left-hand corner, where the neck is exaggerated. The type more often has handles added, as those brought by the Keftiuans in Rekhmire, in Pl. v, bottom row of deposited presents, and the vase carried by the fourth man in the top row; also by the Syrians, as in Menkheperresenb, Müller, *Egyptological Researches*, ii, Pl. 5, and more decoratively treated in Pls. 4, 6; cf. that brought by the Keftiuans and North Syrians on Pl. 2, and Rekhmire, top row but one of the deposited presents.

[2] P., *I.K.G.*, Pl. xvii, 8, *Meydum and Memphis III*, Pl. xxviii, 134, both now in the Ashmolean Museum, where they were examined.

[3] Müller, *Egyptological Researches*, ii, Pls. 3, 5; cf. the second vessel from the right on Pl. 6, which, ending as it does in a sort of calix, may represent a similar idea.

[4] Petrie, *Arts and Crafts of Ancient Egypt*, figs. 120, 121. Fig. 120 has had handles of yet another sort added.

[5] As for instance on vases similar to *L.A.A.A.*, vi, Pl. xix, *a*, and on the vases figured in the same publication on Pls. xix, *b*, 3, xxii, 1, 2, 3, 6, and many others. The vessels of Pl. xix, *a*, *b*, date to the First Bronze Period, and are therefore earlier than the XVIIIth Dynasty.

[6] Macalister, *op. cit.* For the high foot see Pls. xliv, 11, lxxiv, 1, lxxxi, 1, 2, 6, lxxxii, 11, lxxxiv, 7, lxxxviii, 1, xc, 1, 2, 3, xci, 12–17, cliv, 14. For the base-ring see Pls. cliv, 11, 12, 25, clii, 17, cxxii, 14, 17, &c. See also Bliss and Macalister, *Excavations in Palestine*, Pl. 35, figs. 1–9, Pl. 34, figs. 1 s, 5 z, 9 s, &c. These can also be found at the other Palestinian sites of Jericho, Tell el Mutesellim, Tell Ta'annek.

[7] For the high foot in Jewish times, see *Excavations in Palestine*, Pl. 52, figs. 1, 2, Pl. 53, fig. 1 j.

[8] H. Schmidt, *Trojanische Altertümer*, nos. 413, 415, 448, 501, 537, 659, 667, 691–700, &c. Often the vase itself, instead of being merely flattened, is actually hollowed out underneath. See nos. 739–741, 751, &c.

[9] We only know it in connection with the plate-like tables of offering made of alabaster, which belong to the proto-dynastic period (as Garstang, *Mahâsna and Bêt Khallâf*, xxix), and the pottery dishes, which latter in all ages are often provided with a high stand (as for instance Engelbach, *Riqqeh and Memphis VI*, Pl. xxxiii, 90 b, l, q, s, x). The frequency with which this occurs leads one to suppose that the stand does not merely represent the common Egyptian ring-stand; for, apart from these possible exceptions, the Egyptians never fastened their ring-stands to the vessels, but kept the two separate throughout the course of their long civilization. Now on turning once more to North Syria we find published two dishes on high stands, though it is not apparent whether these are hollow or not (*L.A.A.A.*, vi, Pl. xix, *a*). These are early, being of the first Bronze Period. On expanding the search from this centre it is found that both to the East and West—in Susa (de Morgan, *Délégation en Perse*, xiii, p. 31, Pls. xi, 4, xii, 1), Thessaly (Wace and Thompson, *Prehistoric Thessaly*, "fruit-stands," pp. 16, 17, 22, types B 3, β, γ, ϵ, belonging to the Second Neolithic Period, and pp. 20, 112, 114, 237, type Γ 3 ξ, belonging to the end of the Neolithic and beginning of the Chalcolithic Age), and Moldavia (*Idem*, p. 257)—dishes mounted on fixed stands occur in the Neolithic and Chalcolithic periods. It there-

as a regular feature is only known to us on the stand vases of tubular or globular shape of the early pre-dynastic age.[1]

Besides the connections already observed between different members of our group of foreign vases, a large number of them contained ointment; that is to say, five pilgrim-flasks, nos. 3, 46 (two vases), and two others similar to no. 3 (from groups B 49, 159); two black polished jugs, no. 59, and another from group B 64; two false-necked amphorae, nos. 86, 87. Two of the types did not contain ointment, viz. the *bilbils* (no. 79 and other specimens from groups B 38 and 173), and the spindle-shaped bottle no. 81. It is strange that the *bilbils*, which seem likely to be Syrian, do not retain signs of ointment, for in later times Syria was the great land for such substances.[2]

fore seems as if these Egyptian dishes do not prove to be an exception, but themselves belong to a very characteristic, widespread, and early northern type.

[1] Such as P., *N.B.*, Pl. ix, 58, 61, 65, 72, &c. Can it be, then, that these stand vases of the intrusive Early Predynastic civilization are in some way connected with Syria?

[2] See above, pp. 14 ff.

APPENDIX.

PRESENT LOCATION OF THE OBJECTS FOUND AT BALABISH.

N.B.—The number is that of the tomb in which objects were found. Where no details are given it is to be understood that all the objects from the tomb in question are to be found in the Museum.

University of Pennsylvania, Philadelphia.

226, except some of the leather and one pottery vase.
101, all except the pottery and marbles.
228, large situla vase only.
212, all except the shells.
38, 126, 209, 225.
Also samples of leather-work, and a bag of giraffe's or elephant's hair.

Brooklyn Institute of Arts and Sciences, Brooklyn, N.Y.

34, vase, knife-blade and shell bracelet.
115, beads and amulets.
128, beads and amulets.
180, all except the leather.
86, 54, 90, 119, 144, 220, 231, 239, 243.
Also large bowl of black-topped pottery, and divining horn and stones.

Cincinnati Museum, Cincinnati, Ohio.

157, pottery only.
50, 75, 181.

Wellesley College, Wellesley, Mass.

39, except one *ushabti*.
107, less two situla vases.
129, vase with handle, and ivory gaming reeds.
153, less beads and one black-topped vase.
212, shells only.
15, 51, 58, 60, 93, 94, 103, 108, 113, 117, 131, 141, 150, 162, 182, 212, 221, 230, 233, 235, 241.

Public Library, Brattleboro, Vt.

115, situla vase and small pilgrim-bottle.
153, beads and black-topped vase.
228, white discoid beads only.
32, 40, 80, 81, 98, 118, 125.
Specimens of leather-work.

Philadelphia Museum, Philadelphia, Penn.

34, two kohl-pots, one of alabaster, one of mud.
213, fragments of pierced leather apron sandal.
226, fine leather and piece of pottery
227, coarse leather.
33, 37, 41, 46, 92, 124, 127, 151, 158, 159, 173, 174, 190, 202, 205, 218, 219.
Also copper axe with binding, diorite mace-head, red vase with white spotted ornament, and set of divining pebbles.

Louisville Museum, Louisville, Kentucky.

16, 111.

University of Illinois, Ubana, Illinois.

134, 152.

Cornell University Museum, Ithaca, N.Y.

101, pottery and marbles only.
128, carnelian necklace and amulets.
180, fragments of leather.
213, portion of pierced leather apron.
226, fragments of leather.
227, beads only.
23, 49, 64, 154.
Also set of divining pebbles and bone hair ornaments.

The Toledo Museum of Art, Toledo, Ohio.

38, small vase with handle.
39, large *ushabti*.
107, two situla vases.
129, fine white vase with incised decoration.
157, very small vase only.
228, pottery only.
8, 9, 27, 28, 36, 71, 72.
Also sandal and specimens of leather-work.

Yale University.

Specimens of leather-work.

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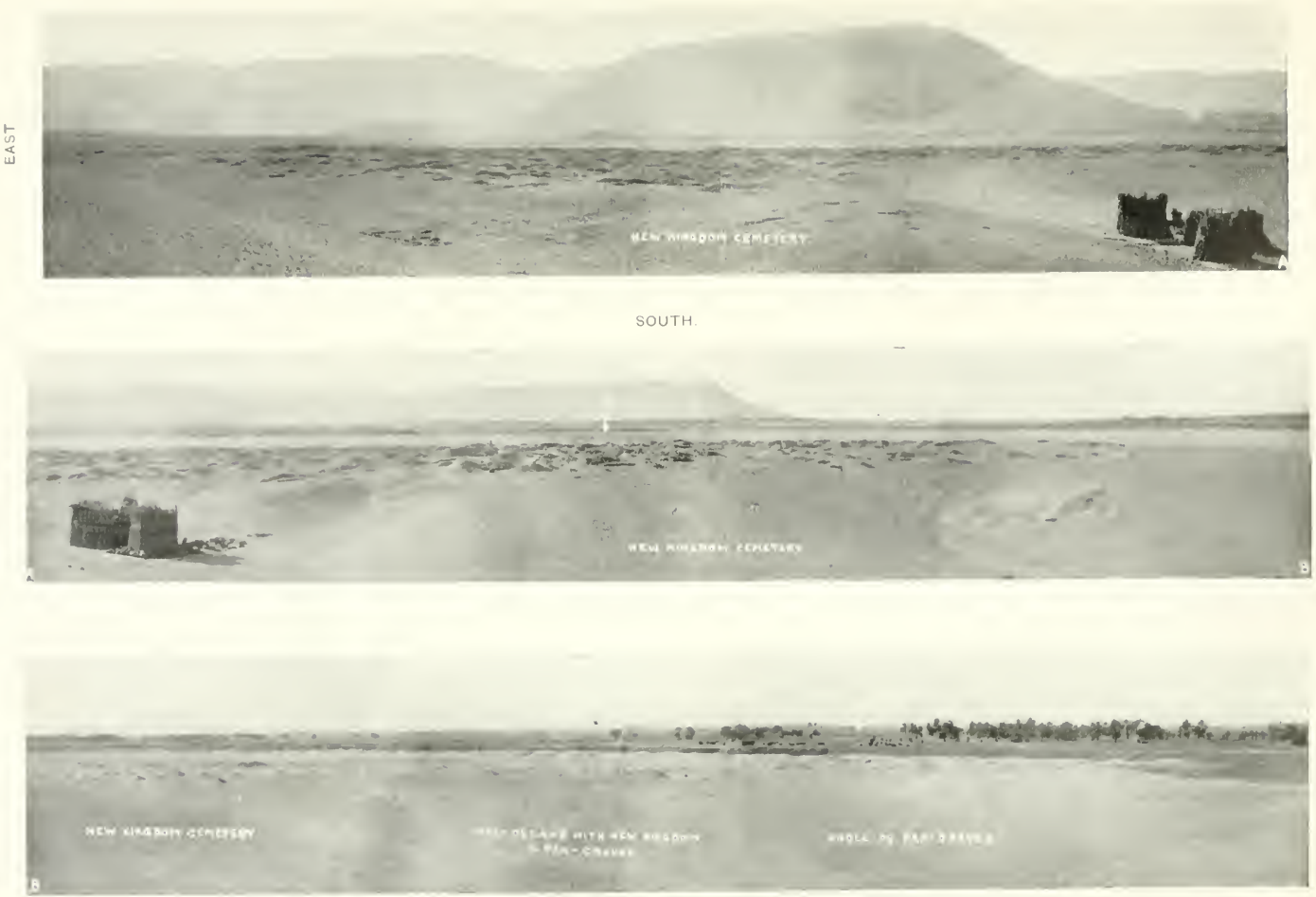
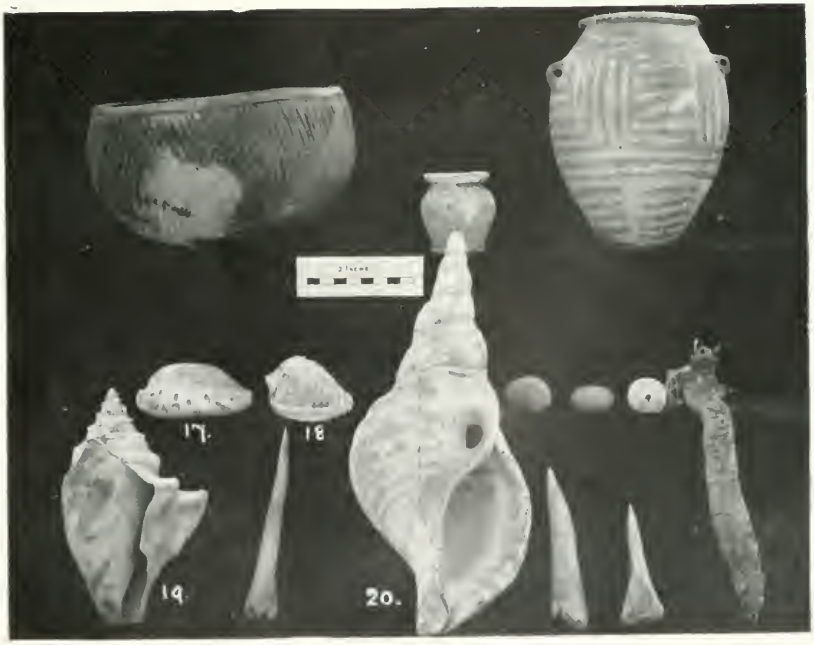


PANORAMA OF THE SITE AT BALABISH.

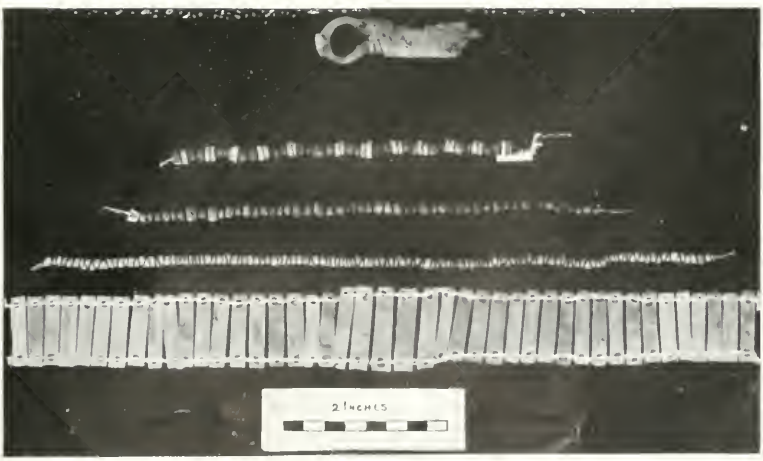
1. TOMB GROUP B 110



2 TOMB GROUP B 203

1. TOMB GROUP B 185.

2. TOMB GROUP B 201

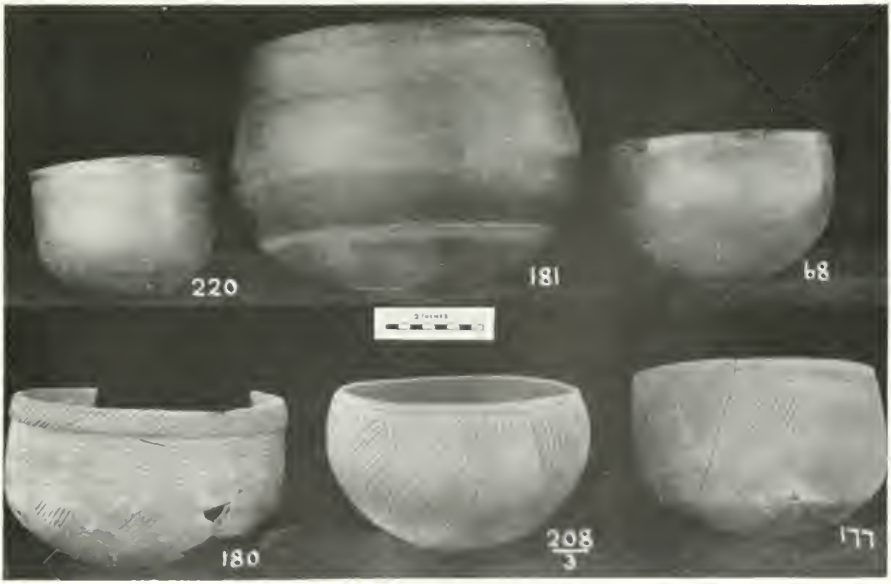


3. TOMB GROUP B 222

1. TOMB GROUP B 212.

2. TOMB GROUP B 213.

1. BUFF, RED-POLISHED, AND HATCHED WARE.



2. BLACK-TOPPED AND HATCHED WARE

1. TOMB GROUP B 226.

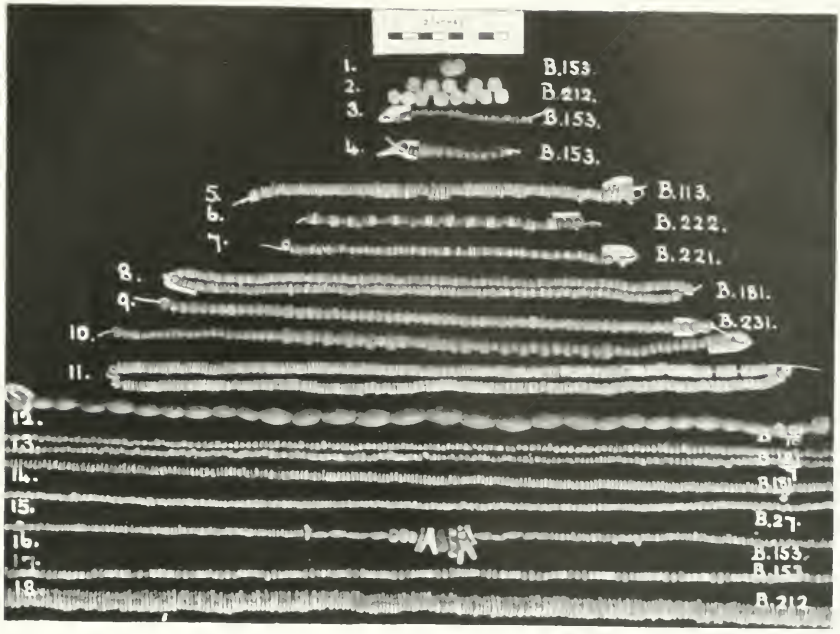
2 TOMB GROUP B 227.

3. TOMB GROUP B 182.

1. TOMB GROUP B 220.

4. TYPES OF BONE BORERS AND SPATULAE.

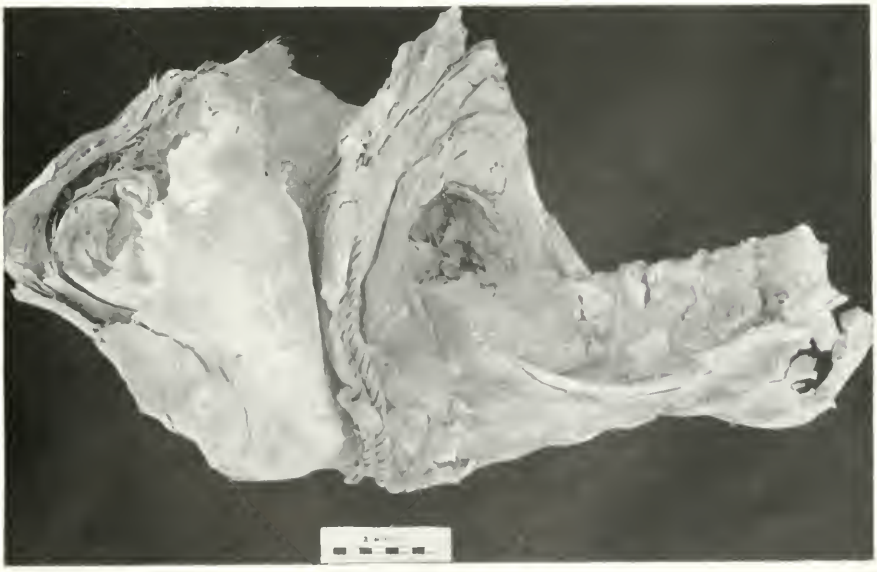
2. TOMB GROUP B 230.



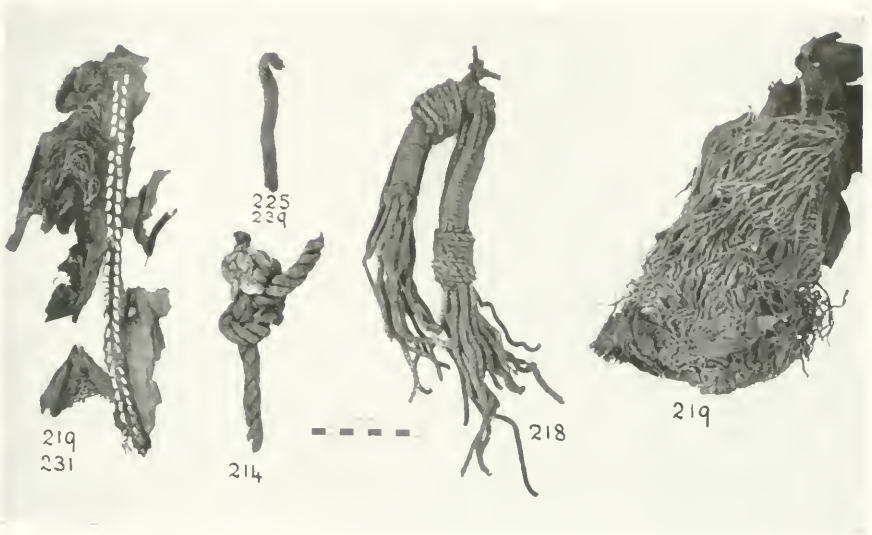
1. BEADS.

2. SHELLS

TYPE 1. B 226. TYPE 2. B 218. TYPE 3. B 234. 243.



2 LEATHERN SKIRT. B 216.

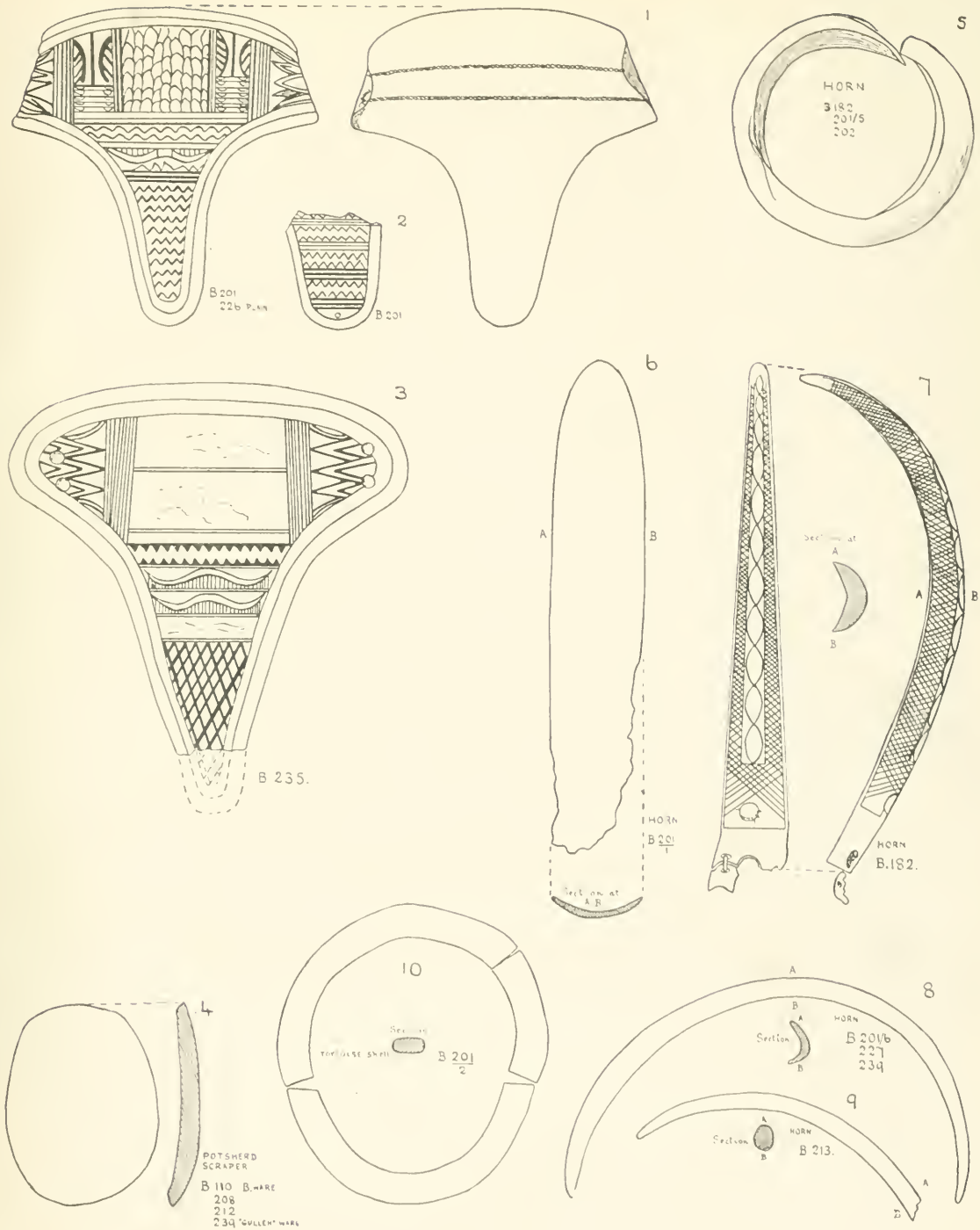


1. TYPES OF FRINGED LEATHER, BEADS SEWN INTO SEAMS, AND CORDAGE.

2 TYPES OF PIERCED LEATHER

1. STITCHED LEATHER. B 179

2 LEATHER BUNDLE WITH BEADS IN THE SEAMS. B 235.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B 201
B 235.
HORN
B 201/5
202
HORN
B 201/1
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POTSHERD SCRAPER
B 110 B. WARE
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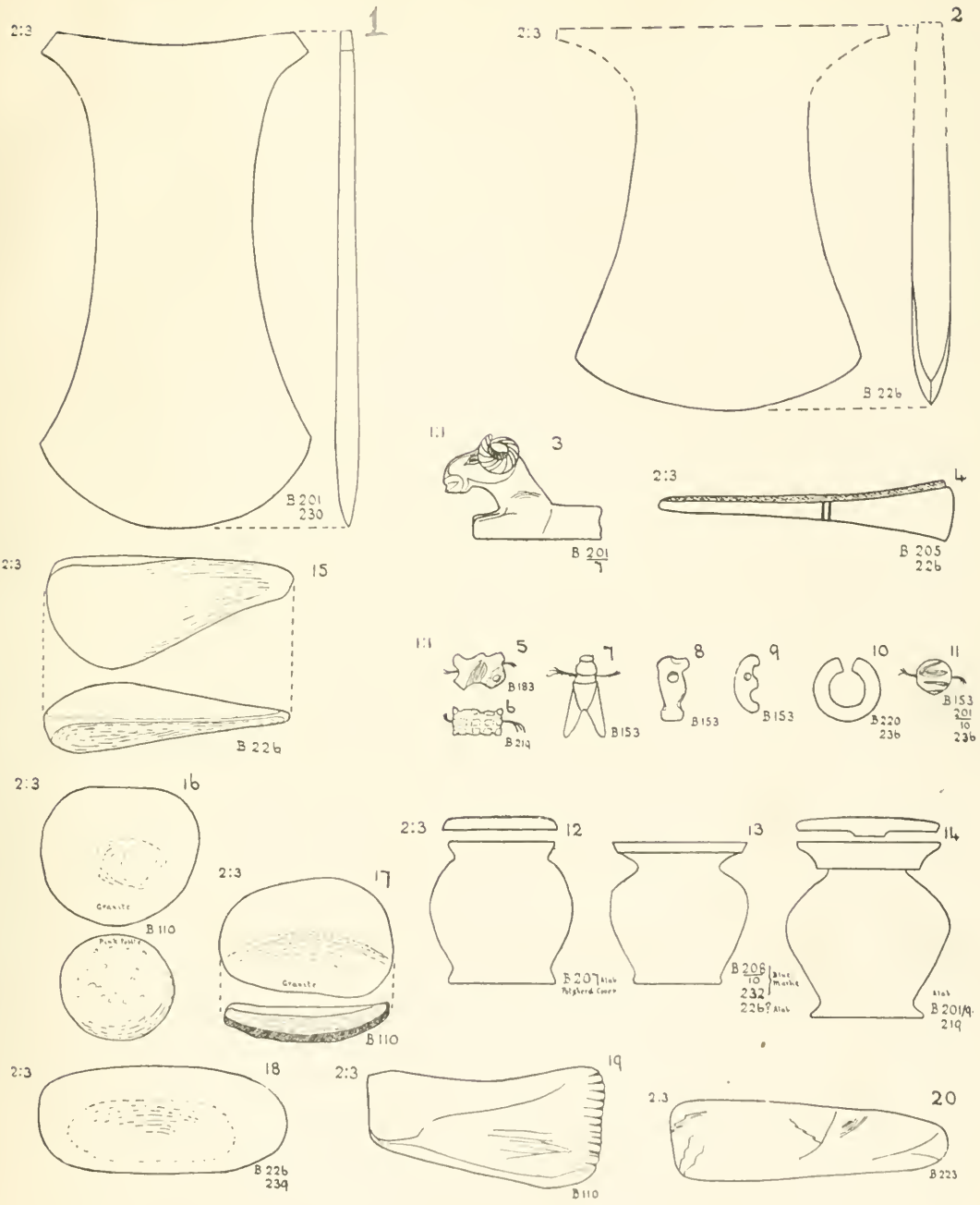
234 "GULLEY" WARE
Section
HORN
B 201/6
227
234
Section
HORN
B 213.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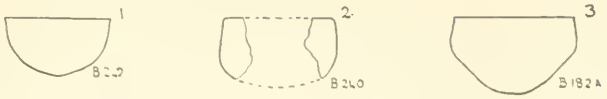
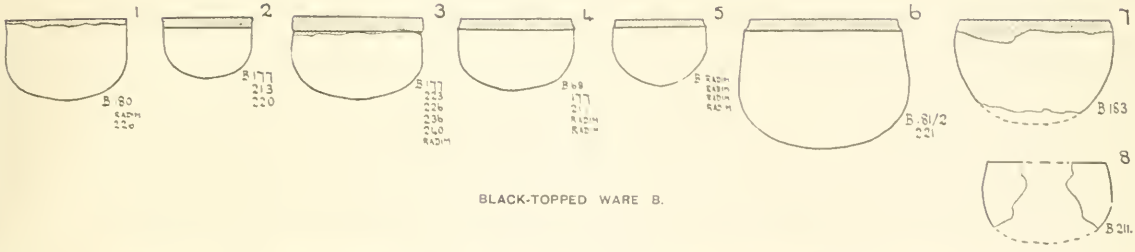
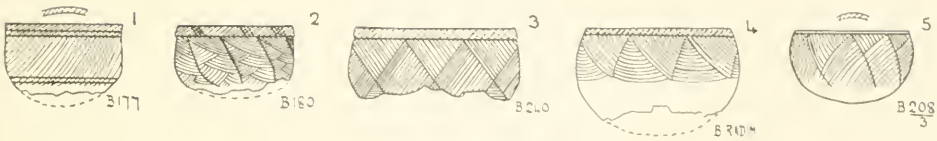


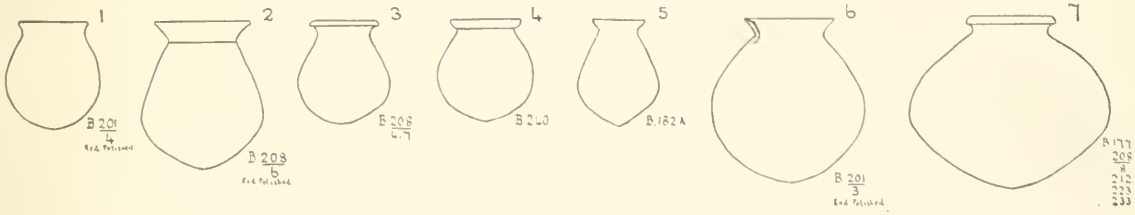
RED POLISHED WARE P.

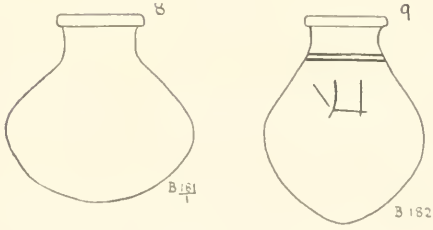


BLACK-TOPPED WARE B.

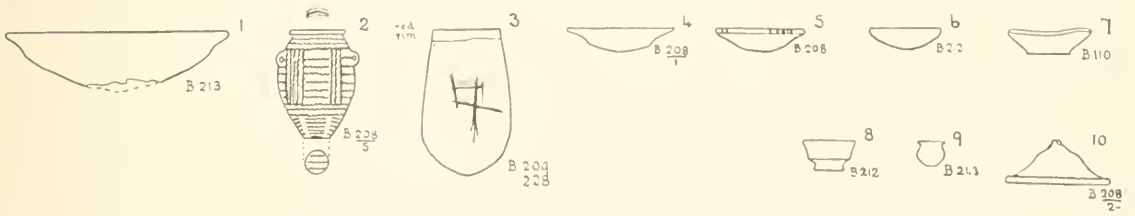


HATCHED WARE H.

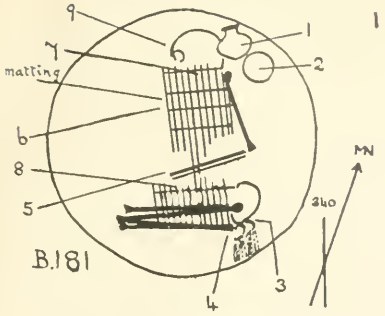




BUFF WARE.



BORROWED POTTERY.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matting
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B.181
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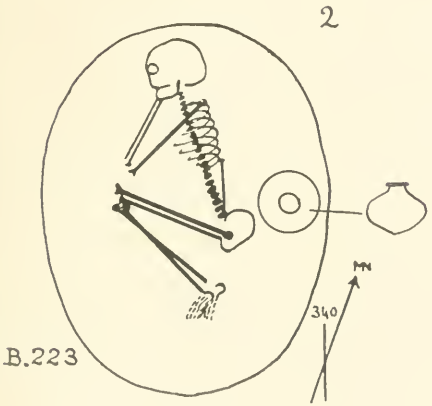
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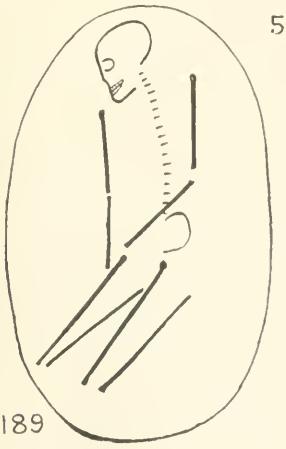
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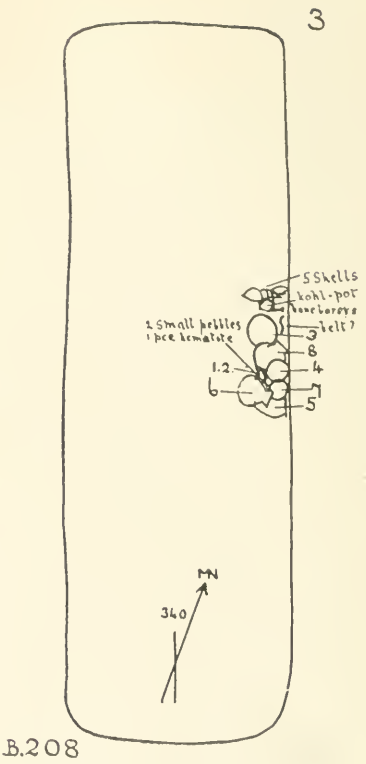
3
5 Skells
kohl-pot
Cowrie
belt?
2 Small pebbles
1 pce hematite
3
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1.2
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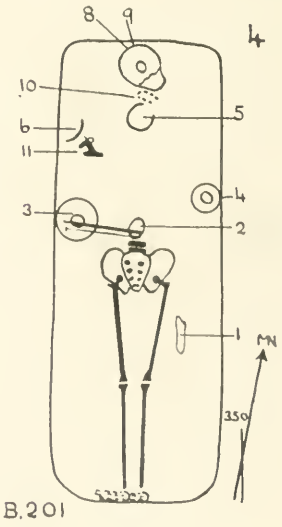
B.208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BALABISH. SYNOPSIS OF TOMBS AND CONTENTS.

NOTE.—The Numbers are the Type Numbers, in the case of Beads on Plate VIII, Amulets Plate XIII, Shells Plate VIII, Pottery Plate XIV, Horn Plate XII, Kohl-pots Plate XIII, Sandals Plate IX.

CIRCULAR GRAVES.—CONTRACTED BURIALS.

NUMBER	GRAVE CONDITION	GRAVE DIAMETER	GRAVE DIAMETER	GRAVE DEPTH	BODY HEAD FACING	BODY SEX	LEATHER COARSE	LEATHER FINE	LEATHER CLOTHING	LEATHER CORDAGE	BEADS TYPE	AMULETS SHELL STRIPS	SHELLS TYPE	POTTERY TYPES P	POTTERY B	POTTERY H	POTTERY BUFF	POTTERY BORROWED	HORN TYPE	KOHL POTS	BONE	COPPER	VARIOUS	REMARKS
110	P				NONE		×				1 18 2 3 13 14		2 3 4 5 6 7 8 9					1				PLATE	2 PALETTES 1 RUBBER 1 NOTCHED PEBBLE B POTTERY SCRAPERS	PALETTES WERE MERELY FLAT PEBBLES. NOTCHED PEBBLE IS A PALETTE ? LEATHER RETAINED ITS HAIR
177	P	150	160	180		M	×	×		×			2.		2 3 4	1	7							FINE LEATHER WAS DYED RED & LINED THE CORDS. BURIAL HAD BEEN WRAPPED IN THE LEATHER & TIED WITH THE CORD.
178	P	110	120	165	NONE						1.			SHERD									WOVEN MATERIAL	WEARING PLAIN & LOOSE
180	P	100	100	55	N	F		×					1.		1.	2					HAIR PIN		4 3RD FEMUR DEPT OF OINTMENT CREEPS LEG BONE	4 SHELLS OF THE ONE KIND WITH A LEATHER DYED RED. WOVEN SKIN & TISSUE ON BONES. LEATHER & FROZEN HAIR.
181	I	95	95	165	340°	W	WITH BLK MAT				1 8 2 3 12 14				6		8						WOVEN MATERIAL MAT PIERCED TYPE	CRIBE BURIED UNDER BOWL SIDE COVERED WITH TAKE UNDER WOVEN MATERIAL THEN WITH MAT. THICK PAD OF LEATHER UNDERNEATH.
182A	P	115	125	160	NONE		×			×	1			3			5						OINTMENT IN BUTT	LEATHER RETAINED THE HAIR.
183	P	105	110	170		M	×	×		×	1 2	5	13 16.		7				SCRAP BRACELET				WOVEN MATERIAL	HAIR ON FIRE RED DYED LEATHER.
185	P	145	125	170		M																	KIDS SKULL SPOTTED RED & BLACK. RAMS HORN.	ANIMAL & HUMAN BONES JUMBLED TOGETHER
202	P				NONE														5.					BRACELETTE WERE A PAIR.
212	P	140	140	120	NONE		×				1 3		1 2 3 6 9 10 15				7	6 8.			HAIR PIN BORER	BORER SCRAPER	UNFINISHED BEADS OF TYPE 1. FLINT FLAKES. LUMPS HEMATITE & RED HEMATITE RUBBED. POTSHERD SCRAPER. MALACHITE.	HEMATITE LUMPS SHEWED A METALLIC LUSTRE. LEATHER BONE AND WOOD
214	P	95	95	150	REMAINS OF THREE					×			1.										MASS MIXED LEATHER WOVEN MATERIAL & BONES	GRAVE CUT IN MARL. MUCH BRAIN STILL ON SKELETONS BOWL.
216	P					F	×		×	×														MUCH SKIN OR BONES
218	P	100	100	170						×													PR SANDALS TYPE 2	2 CORDAGE NEAR REMAINS USED AS BELTS
219	P	130	130	125	NONE				×	×	1 3 9	6.								14				CORD WOUND ROUND WAIST AS BELT LEATHER NURLESS BEADS TASSELS ON THIGHS & KNEES. FRINGES.
220	P	110	110	120	30°	W M					1 3		2.		2								CALCITE CRYSTALS SHELL EARRING TYPE 13.	
222	P				NONE						1 3 6 9 12	STRIPS											SANDAL LOOP.	
224	I	120	110	110	20°	W F?	×			×														WOVEN SKIN LEFT ON SKELETON CORD TIED UP BUNDLE OF LEATHER WITH BODY INSIDE
225	P				NONE				×	×	1.								BRACELETS WRIST				TYPE OF FLAT GLAZED STONE PALETTE?	LEATHER WITH PIERCED PATTERN CORD OF PLAITED LEATHER BRACELETS WERE A PAIR.
226	P	120	140	120	NONE		×	×			1.				1 3.					13?		AXE TWEEZERS	PR SANDALS TYPE 1 & SMOOTH STONES. 1 WRISTGUARD SIDE PLAIN CREEPT FOR LOTUS IN CORNERS.	AXE BOUND TO HANDLE BY SIDE THONGS. COARSE LEATHER LINED PLAIN LEATHER RETAINED HAIR. RED-DYED LEATHER NURLESS
239	P	140	140	160	NONE		×			×	25.				SHERD			1		8.		STAIN ON PELVIS	WOVEN MATERIAL OF A STUD CALCITE. MAT. TYPE 2. OVAL FLAT PEBBLE. "KALEN" WARE SCRAPER HOOP BOUND WITH LEATHER RIBBON	WOVEN MATERIAL OF COARSE BROWN QUALITY. CORD OF PLAITED LEATHER ALSO PLAIN TWIST. HAIR ON THE LEATHER. SKIN LEFT ON BONES. PEBBLE WAS A PALETTE?
240	F				NONE		×						1 INSIDE POT. 1. 2.		2	3	3	4					SCENT OF OINTMENT IN THE POT. BUFF 6	HAIR ON THE LEATHER.

OVAL GRAVES.—CONTRACTED BURIALS.

NUMBER	GRAVE CONDITION	LENGTH OF GRAVE	BREADTH OF GRAVE	DEPTH OF GRAVE	AXIS																			
96	P	130	80	140	NONE						21. 22 3	STRIP	2.											
150	P	200	100	100	NONE						2 3													
176	P	120	90	180	320°	NONE					3.													GRAVE WHOLLY IN GRAVEL
179	P	160	130	165	320°	NONE	×	×															YELLOW SHEW.	
189	I	140	110	100	300	SSW																		CALF MADE TOOTH NOT CUT. TYPE 2 BROW LEFT.
209	P	130	55	125	300°	NONE							5 6.					3.						
210	I	140	80	130	320°	F					2.													BEADS ON NECK.
211	P	175	125	140	320°	NONE	×								SHERD	4 8								
213	P	150	120	110	310°	M	×	×	×		3.				2.			1	9.					
																							SEVERAL LARGE BLACK FEATHERS. ELEPHANT HAIR DAC. SHORT PIECES OF HAIR. 3 SMALL BLK PEBBLES	LEATHER WITH PIERCED PATTERN NEAR PELVIS. FINE LEATHER DYED RED. LINED THE COARSE LEATHER. CORDS OF LEATHER RETAINED HAIR. STEPS OF HIDE WITH INCISION
223	I	130	100	105	340°	W	×			×			2.		3		7						CHERTSTONE NONE?	GRAVE CUT DOWN INTO MARL.
232	P	120	70	110	340°	NONE	×													13.				STEP-WISE AT S END 3 STEPS. SMALL POT OF BLUE MARBLE. HAIR ON THE LEATHER
236	P	140	70	125	335°	NONE		×			3.												PR SANDALS TYPE 3.	BEADS STITCHED INTO LEATHER.
241	P	135	60	130	320°	NONE					1 2 13 23.												SHARPLATE HAIR.	LATERAL WHITE STRIPE ON ONE SIDE

For explanation of reference numbers see Plate XVI.

LONG GRAVES.—EXTENDED BURIALS.

NUMBER	GRAVE: CONDITION	GRAVE: LENGTH	GRAVE: BREADTH	GRAVE: DEPTH	BODY: HEAD ∠ AXIS	BODY: FACING	BODY: SEX	LEATHER: COARSE	LEATHER: FINE	LEATHER: CLOTHING	LEATHER: CORDAGE	BEADS: TYPE	AMULETS & SHELL STRIPS: TYPE	SHELLS: TYPE	POTTERY TYPES: P	POTTERY TYPES: B	POTTERY TYPES: H	POTTERY TYPES: BUFF	POTTERY TYPES: BORROWED	HORN: TYPE	KOHL POTS: TYPE	BONE	COPPER	VARIOUS	REMARKS
27	P	270	100	200								3.													
68	P	300	100	160												4									
98	P	270	100	160								1 2 6													
153	P	250	125	205								3 5 10 11 12 24 21.	7 8 9.												TYPE 3 BEADS OF BAD DARK GREENISH COLOUR.
184	P	210	100	170						X														LEATHER WITH PIERCED BUTTON OR THONG. SKIN ALMOST INTACT.
188	P	210	105	140																				LATERAL HIDES OF SLIDE MUCH SKIN LEFT.
195	P	210	·65	145	330°							3.													
201	P	165	·60	170	350°		M	X	X			3 21.						1 6		5 6 8.	14.		AXE RAM	TORTOISE SHELL BRACELET WRISTGUARD. YELLOW SINEW BANDS. WOVEN MATERIAL. BEADS & CENTRE PENDANT IN BATS POTS.	KOHL POT SUPPLIED WITH POTTERY COVER. CORNELIAN BEADS AT NECK. BANDS. FINE LEATHER DYED RED. TYPE 3 BEADS SEWN ON. 3-6 SALTING ON FACE & COVERED WITH LEATHER & WOVEN MATERIAL. TYPES 1 & 2 6 6 SEE SALT UPWARDS
205	P																						CHISEL		
207	P	225	100	130									9	1. 2.							12.				KOHL POT SUPPLIED WITH COVER RUBBED DOWN FROM POT USED. SHELLS STRUNG ON LEATHER.
208	P	225	·80	190	340°				X					15? 17 18 19 20.				5. 3.2. 3.7.	2 4 5 10.		13?	3 BOWLS		WOVEN BELT? ISCEAP OF HEMITYPE 2 SMALL PIERCED SCENT OR OINTMENT SCRAPER OF POTTERY.	KOHL-POT OF BLUE MARBLE BEHIND. BANDED POT 2 IS PRE DYNASTIC LEATHER IN COVER OF POT BUFF AS BADARI
230	P	280	110	160	340°			X						1.									AXE	2 SHEEP LEGBONES	MUCH SKIN LEFT ON BONES. LEATHER WITH HAIR ON IT.
231	I	210	·90	135	320°		F			X		1 3 9.		2.										LEATHER WITH FRINGE	TYPE 9 BEADS AT NECK. OTHERS SEWN IN LEATHER.
235	P	180	·90	160	315°		M		X		X	1. 3.		2.										WOVEN MATERIAL MAT PIERCED TYPE SKIRT SOMETIMES HARD BORDERED LEATHER. WRISTGUARD.	BLUE & WHITE BEADS TYPES 1. 3. SEWN WITH LEATHER. TWO BUNDLES OF LEATHER COVERED BY LINEN & AGAIN BY MAT. PARTS OF 2 SKELETONS. CORD PLAIN TWIST. VERY FINE CORDS TO WRISTGUARD.
238	I	180	·80	·80	320°		F				X													MAT. TYPE 2 COARSE QUALITY WOVEN MATERIAL.	LAID ON FACE WRAPPED IN CLOTH. MAT LAID OVER WITH HENNA PASTE COATED THE WHOLE. SKIN WELL PREPARED, SEED. HAIR IN SHORT THIN PLAITS. NO MAT OF HENNA BENEATH BODY. 3 LEATHER CORDS AS BEFORE.

DEPOSITS WITHOUT BURIALS.

182	SMALL TRIANGULAR HOLE											1						9.		5. 7.				OINTMENT IN POT	HOLE ONLY JUST DEEP ENOUGH TO CONTAIN POT. FEW BEADS AND DISCS BESIDE POT WRAPPED IN CLOTH.
233	SMALL IRREGULAR HOLE																	7.						OINTMENT IN POT.	POT WAS SEALED & CRACKED WITH OINTMENT.

SUNDRY "PAN-GRAVE" GROUPS.

221	P											1 3 10				6.									
227	P							X				11 12 13								8.				1 PR SANDALS TYPE 1.	LEATHER BUNDLE WITHOUT HAIR.
228	P											1 3 13							3						
236	P				SHELL ON L. LEFT				X			1 3 15.		2 6.		3.								1 SHELL EARRING TYPE 10.	PCE SLATE CHIPPED ROUND EDGES. BLUE BEADS BE WORN TO LEATHER.
242	P											1 2 3 6 12.		2	1										
243	P								X										9.					SANDAL TYPE 3? PALETTE OF BROKEN PIECE OF SANDSTONE	MUCH GRIT OR REMAINING BONE. GREEN PLASTERING IN PALETTE. LEATHER DYED RED.

1. TWO VIEWS OF A SANDAL

2. FOREPART OF A BROCADED

1. POT WITH PIERCED PROTUBERANCES.

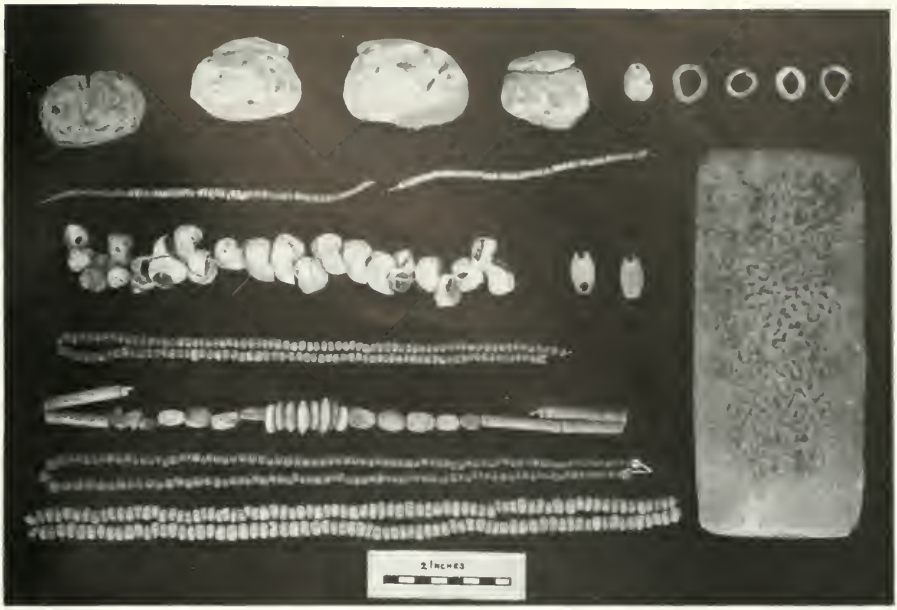
2. PENANNULAR EARRING IN POSITION. B 66.

3 TOMB GROUP B 154

BALABISH. GROUP B101 AND THREE VIEWS OF THE FIGURE VASE. LATE XVIIITH DYNASTY.

1. TOMB GROUP B 50. TWO POTS WITH HUMAN HEADS.

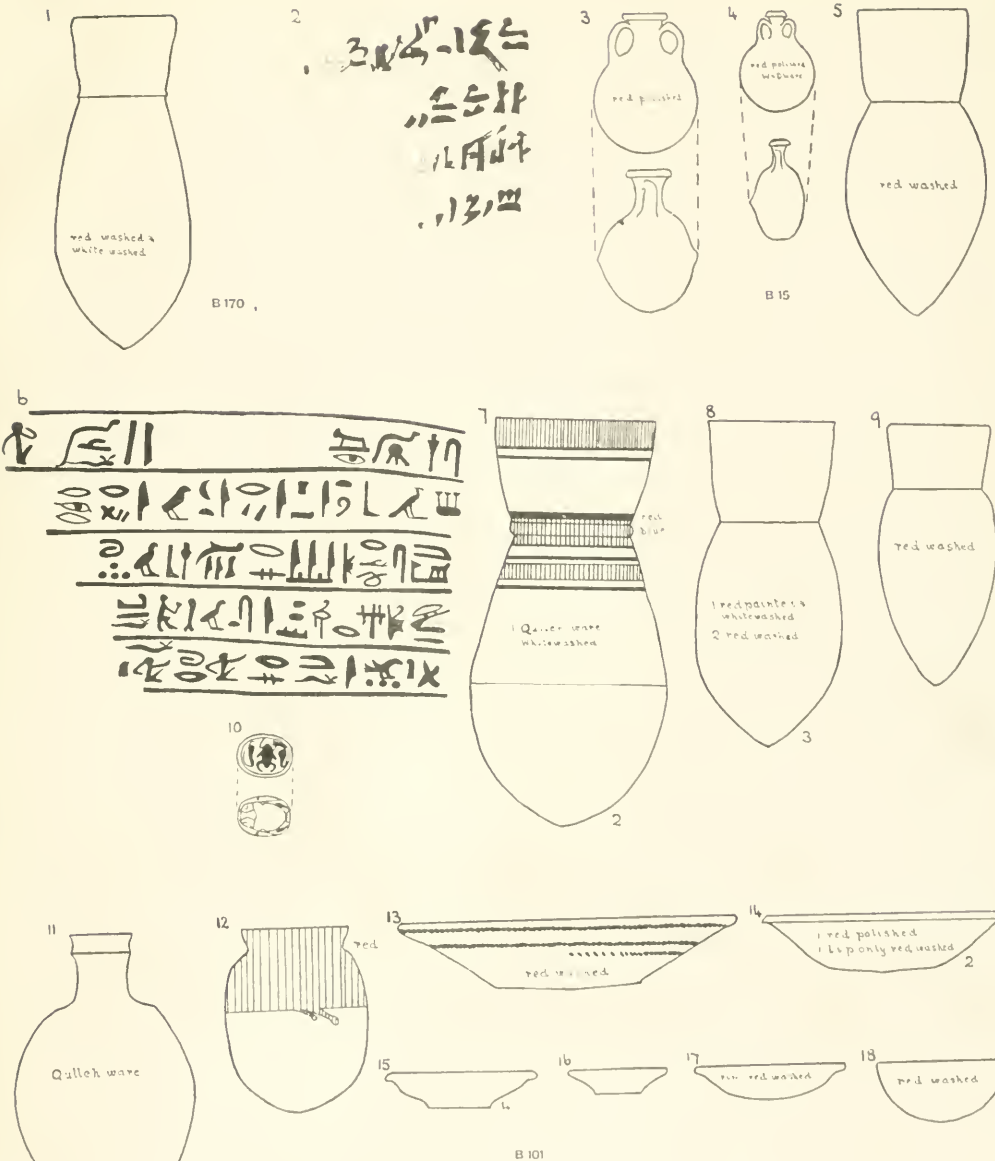
2. TOMB GROUP B 36. FIGURE VASE. CANOPIC JAR COVERS? USHABTIS?



1. TOMB GROUP B 90.

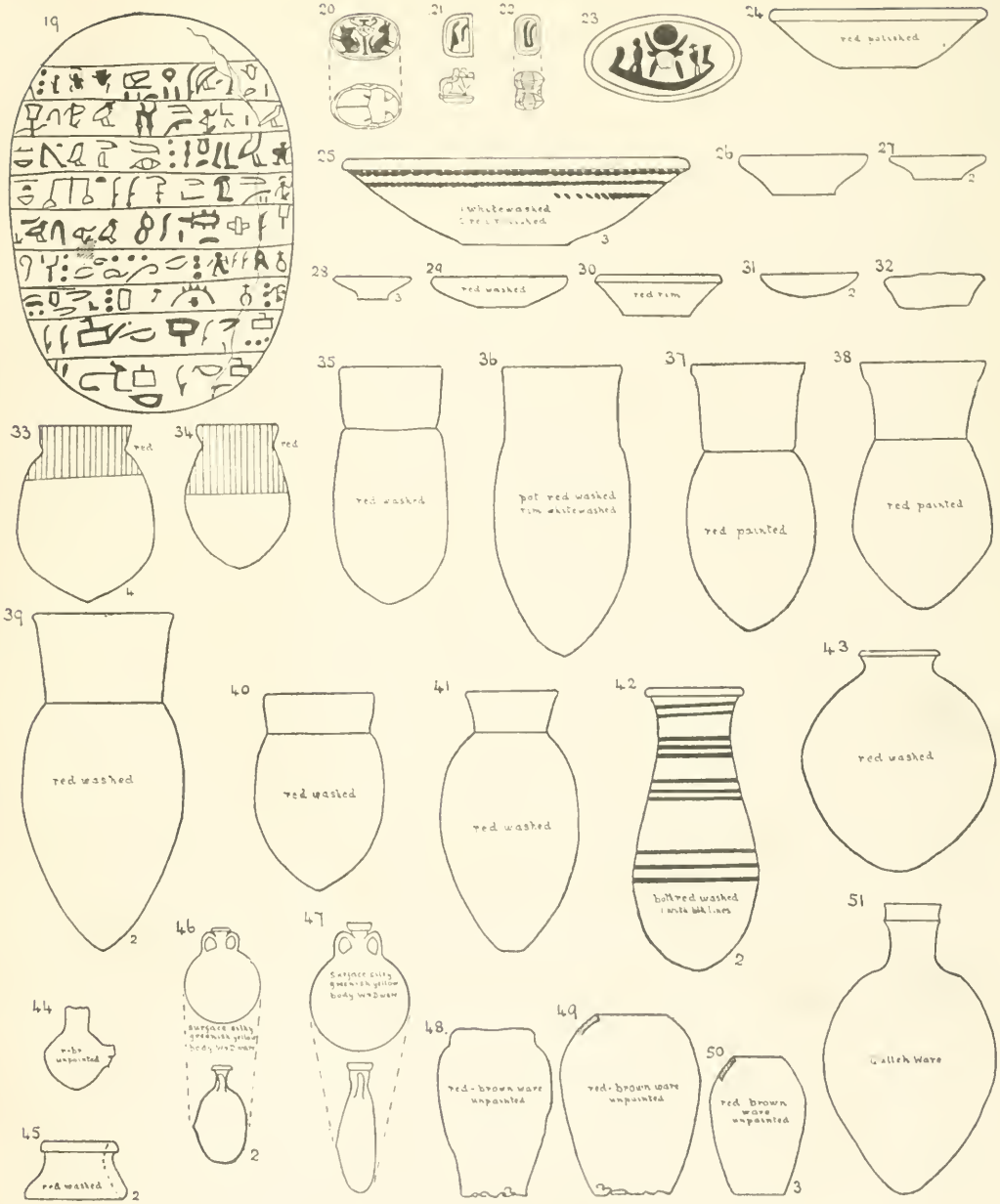
2. TOMB GROUP B 157

SCALE OF VASES 1:6
„ „ SCARAB 1:1



The figure at the foot of a pot indicates the number of that type found in the grave.

SCALE OF VASES 1:6
" " SCARABS 1:1



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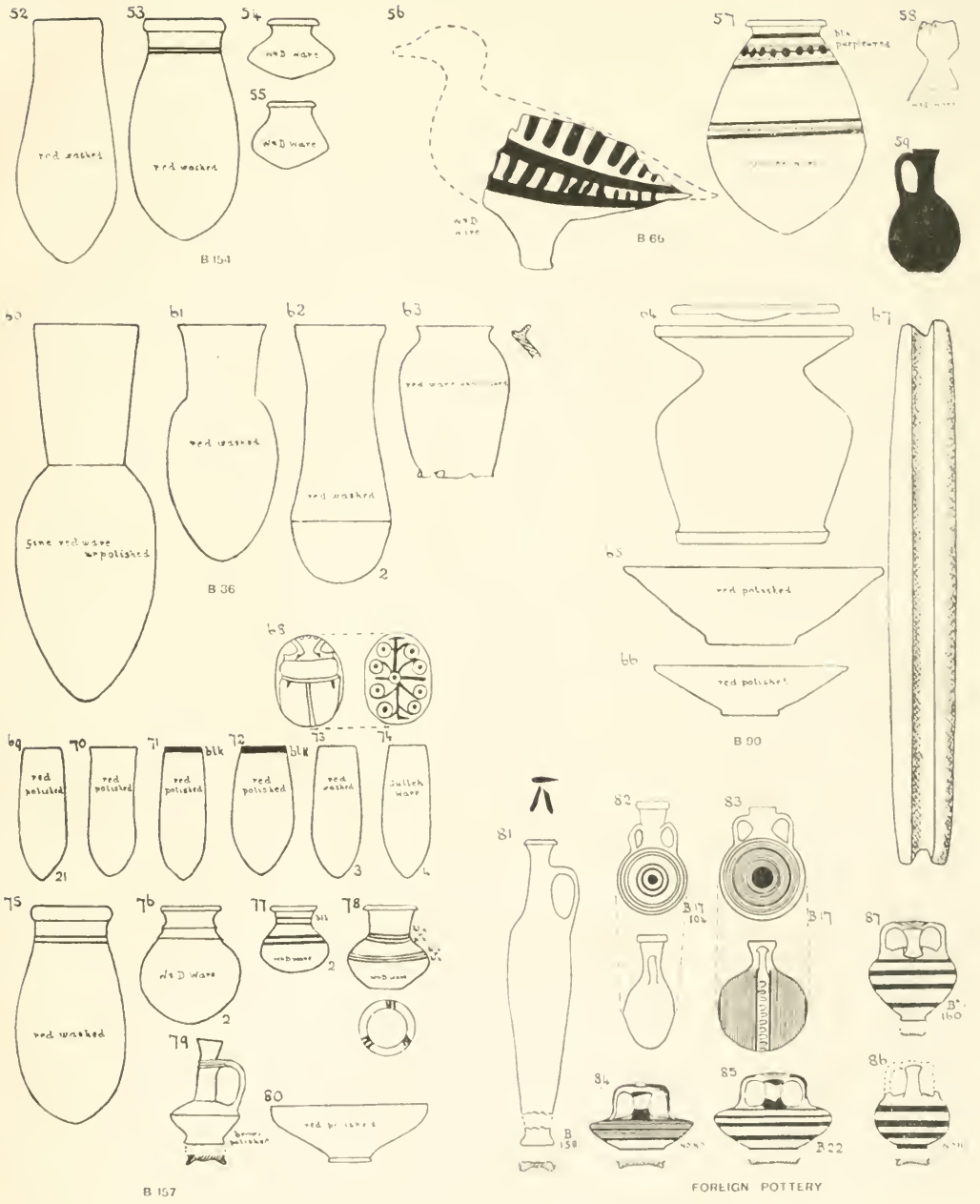
SCALE POTTERY 1·6
OTHER OBJECTS 2·3



The figure at the foot of a pot indicates the number of that type found in the grave.

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